

THE WALLED CITY OF AHMEDABAD
PROPOSING A NEW FRAMEWORK FOR THE CONSERVATION AND MAINTENANCE OF POL
HOUSES THROUGH ANALYSIS OF THE ROLES OF DIFFERENT STAKEHOLDERS

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TABLE OF CONTENTS

Chapter 1: Introduction	1
1.1 Introduction	2
1.2 Rationale	4
1.3 Research Objectives	6
1.4 Methodology	6
Chapter 2: Pol Houses	9
2.1 Urban History of the Walled City of Ahmedabad	10
2.2 Pols and the Pol Houses: History	11
2.3 Pols and the Pol Houses: The Context and the Scenario	12
2.4 Pols and the Pol Houses: The Culture and the Community	17
2.5 Pols and the Pol Houses: Existing Governance	20
2.5.1 Ownership	20
2.5.2 Existing Governance	21
Chapter 3: Methodology	25
3.1 Literature study	26
3.2 Field Visit	38
3.3 Identifying the Stakeholders	40
Chapter 4: Findings	45
4.1 Observations of the pols in a physical setting	46
4.1.1 Streetscape and context	47
4.1.2 Issues in the planning of pol houses	49
4.1.3 Destruction due to the nomination for World Heritage List	50
4.1.4 Deterioration in the pol houses	51
4.2 Interviews with different stakeholders	53
4.2.2 Interview with Restoration Specialists	56
4.2.3 Interview with the City Officials	58
4.2.4 Interview with the Developers/Investors/NGOs	59
Chapter 5. Analysis	63
5.1 Pols and the Pol Houses: Assessing the significance of the values	64
5.2 Factors affecting the pols	68

5.2.1 Physical issues associated with the pol houses.....	69
5.2.2 Social Issues	71
5.2.3 Planning and Policy	74
5.2.4 Infrastructure and Services	77
5.2.5 Environmental Effects.....	78
Chapter 6: Case Studies	81
6.1 Historic Centre (Old Town) of Tallinn, Estonia	83
6.2 Hoi An Ancient town, Vietnam	88
6.3 Old City of Yangzhou, China	94
Chapter 7: Proposal	105
7.1 Vision.....	112
7.1.1 Conservation Policy	113
7.1.2 Socio-economic Development Policy	116
7.1.3 Integration and Educational Policy	117
7.1.4 Urban Planning and Heritage Policy	119
7.2 Proposed Governance Framework	120
7.2.1 An Intermediary Agency	121
7.2.2 Actions by Government	127
7.3 Strategy Development.....	129
Chapter 8: Conclusion	136

ABBREVIATIONS

CEPT: Centre for Environmental Planning and Technology

AMC: Ahmedabad Municipal Corporation

ASI: Archaeological Survey of India

GOG: Government of Gujarat

TDO: Town Development Office/r

AUDA: Ahmedabad Urban Development Authority

CRUTA: Conservation and Research of Urban Traditional Architecture

HUDCO: Housing & Urban Development Corporation Ltd

GDCR: General Development Control Regulations

TDR: Tradable Development Rights

UNESCO: United Nations Educational, Scientific and Cultural Organisation

CHC: City Heritage Centre

MHT: Mahila Housing Trust

SEWA: Self-Employed Women's Association

CER: Collegium Educationis Revaliae

GTZ: German Technical Cooperation

CAP: Community Action Planning

iYET: international Yangzhou Experts Team

YFCC: Yangzhou Famous City Company

OCO: Old City Office

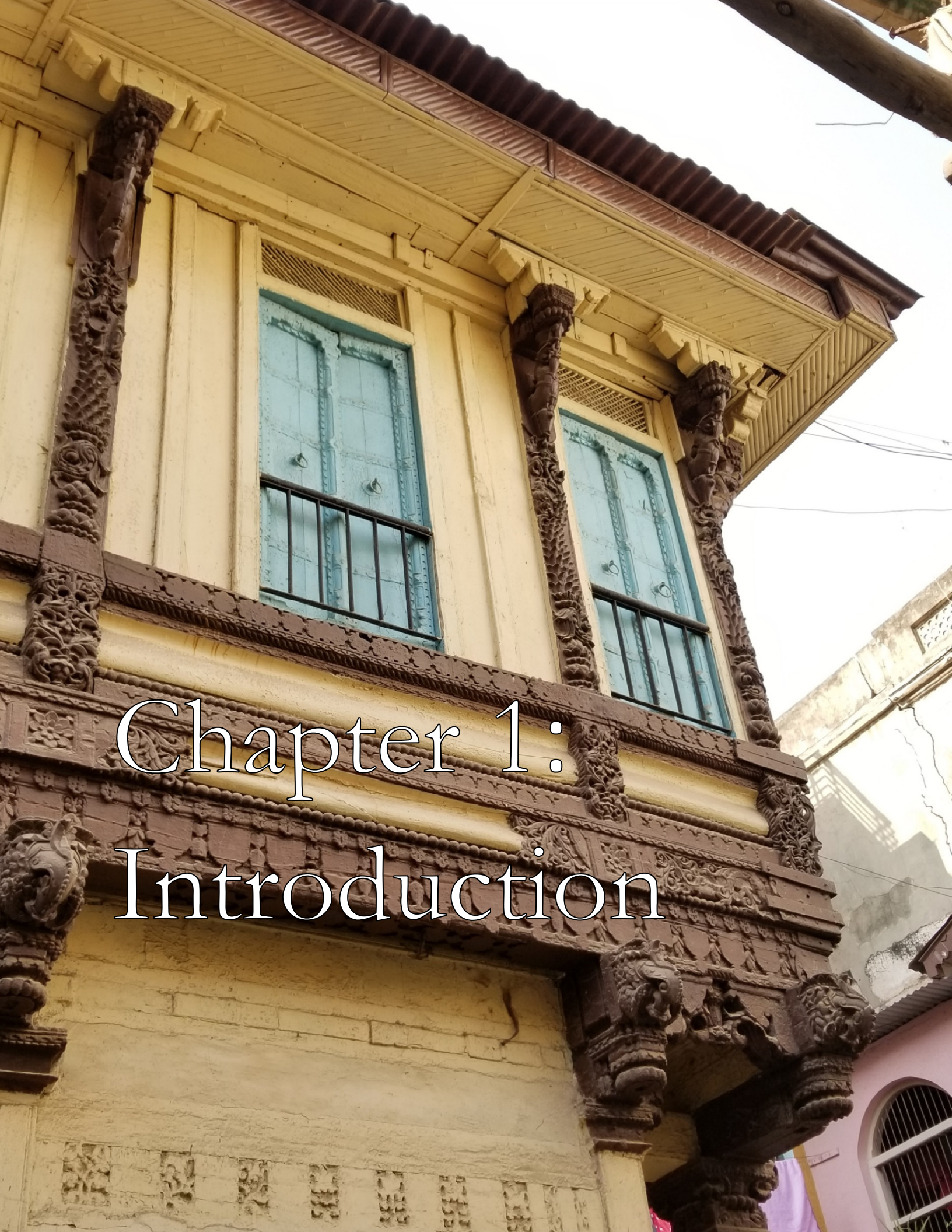
LIST OF FIGURES

FIGURE 8. WOMEN WASHING CLOTHES ON THE ENTRANCE PLINTH	16
FIGURE 9. A CLOTHES BUSINESS ON THE FIRST FLOOR AND HOME ON THE SECOND FLOOR.....	16
FIGURE 10. THE CULTURAL SIGNIFICANCE VALUE ASSESSMENT PROCESS BY GETTY INSTITUTE	64
FIGURE 11. MAP OF DHAL NI POL WITH HERITAGE GRADE VALUE	46
FIGURE 12. KEY MAP OF DHAL NI POL, AND LEGENT OF THE HERITAGE GRADE VALUE	46
FIGURE 13. A TEAM OF FAMILY AND FRIENDS STANDING AT THE ENTRANCE OF DHAL NI POL TO PARTICIPATE IN THE INTERVIEWS WITH THE OWNERS.....	47
FIGURE 14. A SMALL PUBLIC SQUARE WITH TEMPLES SHOWING UNCLEAN STREETS	47
FIGURE 15. POL STREETS SHOWING LACK OF PARKING SPACE	48
FIGURE 16. UNCLEAN POL STREETS	48
FIGURE 17. NO OPENINGS IN THE KITCHEN OF A POL HOUSE.....	49
FIGURE 18. DINING SPACE WITH NO OPENINGS IN THE SPACE	49
FIGURE 19. A HOUSE THAT HAD HERITAGE VALUE STRIPPED OFF OF ITS HISTORIC FACADE AFTER THE CITY WAS NOMINATED IN THE WORLD HERITAGE LIST	50
FIGURE 20. ANOTHER HOUSE WHICH HAD A HERITAGE VALUE THAT WAS CONVERTED INTO AN APARTMENT BUILDING	50
FIGURE 21. A SKEWED SECOND FLOOR FACADE OF A POL HOUSE	51
FIGURE 22. STRUCTURAL CRACK AT THE BOTTOM OF THE BALCONY AND HEAVY SOILING	51
FIGURE 23. LOSS OF HISTORIC DOOR IN AN ABANDONED POL HOUSE.....	52
FIGURE 24. LOSS OF WINDOW PANELS.....	52
FIGURE 25. INTERVIEWING THE TENANTS AND OWNERS OF A POL HOUSE WITH A HERITAGE GRADE VALUE.....	53
FIGURE 26. INTERVIEWING AN OWNER	54
FIGURE 27. INTERVIEWING AN OWNER	54
FIGURE 28. OWNER OF THE POL HOUSE WITH HIGHEST HERITAGE VALUE TALKING ABOUT LACK OF TRAINED WORKERS FOR RESTORING THEIR MOSAIC FLOORING	69
FIGURE 29. OLD TOWN OF TALLINN, ESTONIA.....	83
FIGURE 30. STREETS OF OLD TOWN OF TAALLINN.....	83
FIGURE 31. LOCATION OF TALLINN	84
FIGURE 32. LOCATION OF HOI ANCIENT TOWN, VIETNAM	88
FIGURE 33. HOI AN TOWN	88
FIGURE 34. STREET VIEW OF HOI AN ANCIENT TOWN.....	89
FIGURE 35. LOCATION OF YANGZHOU, CHINA.....	94
FIGURE 36. HISTORIC HOUSES OF THE OLD CITY OF YANGZHOU.....	95
FIGURE 37. POSTER OF THE 4 DAY WORKSHOP WITH THE COMMUNITY	99
FIGURE 38. STAKEHOLDER MEETING.....	99
FIGURE 39. DESIGN MODELS FOR THE OWNERS TO FOLLOW AS THEIR INCOME CIRCUMSTANCES CHANGE	100
FIGURE 40. RENOVATED COURTYARD.....	101
FIGURE 41. RENOVATED TOILET AND KITCHEN.....	102
FIGURE 42. RENOVATED FACADE OF THE HISTORIC HOUSES.....	102
FIGURE 43. SCENARIO PLANNING AND BRAINSTORMING PROCESS FOR DESIGNING POLICIES.....	111
FIGURE 44. SCENARIO DEVELOPMENT TO REACH THE VISION	112
FIGURE 45. CONSERVATION AND INCENTIVES FOR CONSERVATION ARE INTERDEPENDENT	113

Abstract

The Walled city of Ahmedabad is the oldest portion of the Ahmedabad city in the state of Gujarat in India, established in 1411 A.D. on the eastern bank of Sabarmati river. The Walled City of Ahmedabad comprises of centuries-old vernacular houses constructed initially to withstand battles. The houses built in the city were organized in dense neighborhoods consisting of a set of dead-end streets entered through a single gateway. The gate into the neighborhood could be closed for security and each house could store its water and grains. These neighborhoods are called pols, and the houses in these neighborhoods are called pol houses. These houses are thriving today with day-to-day life and carry with them the history worth of six centuries. These houses are the reflection of the city and should be preserved and maintained so that the heritage of the city keeps living.

Over the years, the condition of these pol houses has deteriorated, and many of these historic houses are dilapidated. The city is losing many of these houses because of changes in the economy, problems in regulations and policies, social problems and lack of awareness. This thesis aims to study the different factors and stakeholders responsible for the deteriorating conditions of the pol houses, and analyze the obstacles hindering the conservation and maintenance of these houses. The research process includes a site visit, examining a selected pilot project - Dhal ni pol, one of the 600 pols in the city, which has 80 pol houses under the local government body's protection. The site visit comprises of interviews of stakeholders of the pol houses – owners, developers, restoration architects, and government entities, to understand the complexity of the dynamics between these stakeholders, and the challenges and dangers the pol houses are facing today. The thesis proposes policies that would contribute in addressing the factors affecting the conditions of the pol houses. It also proposes a co-management public-private framework and strategy for the better execution and monitoring of the policies.



Chapter 1: Introduction

There is an urgency to develop a critical culture in which heritage is approached and understood as a dialogue between past and present: heritage must belong to the present in the same measure as it belongs to the past. Heritage is about the present, it lives in the present and is received, practiced and consumed by people today.¹

BEMIS, 2011

1.1 Introduction

The Walled City of Ahmedabad is the oldest portion of Ahmedabad, which was established in 14th Century A.D in the state of Gujarat in India. Over the centuries, several rulers invaded the city, influencing the city's culture, history and architecture. The Walled city is comprised of structures influenced by several dynasties, i.e. Sultanate rule, Mughal rule, Maratha rule, and the British rule until the country gained its independence in 1947. The houses in the Walled city were designed to protect the people during the battles between the different dynasties. These houses were organized in dense neighborhoods consisting of a set of dead-end streets entered through a single gateway. The gate into the neighborhood could be closed for security and each house could store its water and grains. These neighborhoods are called pols, and the houses in these neighborhoods are called pol houses. The Walled city carries with it the evidence of all these prior rulers in the architecture of its monuments and the pol houses, and it is of utmost importance that this unique heritage of the city is preserved. Based on these

¹ New Perspectives On Heritage: A Route To Social Inclusion ..., http://bemis.org.uk/docs/new_perspectives_on_heritage.pdf (accessed April 01, 2018).

attributes, the Walled City of Ahmedabad was inscribed on the World Heritage list in July 2017. It was inscribed on the World Heritage List under criteria (ii) and (v).^{2 3}

The significance of the city lies in the way it was planned to protect the people during battles - the single-way entry and exit, secret passages in each pol leading to other pols for a quick escape, and underground water tanks and storage space enough to store grains and water during the battles. The pol houses are made of wooden posts and beams with an infill of bricks and lime mortar. Some of the most noteworthy features of a typical pol house are the central courtyard, carved doors and windows, ornamentations and the planning of the houses.

The pols and the pol houses have evolved through time by the changing needs of the communities living there. The changes are in the form of new construction materials and techniques, introduction of modern amenities like vehicles, WIFI, parking spaces and the increasing need for privacy among the younger generations. These have adversely affected the pol houses causing them to deteriorate with time. This continuous deterioration is not being maintained regularly leading to devastating results on the pol houses today. Many pol houses are in decaying state, while some have turned into ruins.

² Criteria (ii) - to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design. Criteria (v) to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

³ Celebrating Ahmedabad's World Heritage Inscription .., http://www.unesco.org/new/en/media-services/single-view/news/celebrating_ahmedab (accessed April 01, 2018).

The lack of conservation and maintenance of these pol houses is due to the lack of action by the stakeholders responsible for this heritage. The roles and the responsibilities of these stakeholders, associated with the pol houses, are undefined and unidentified. This issue has caused severe gaps in the communication between the stakeholders as well as the steps taken towards the conservation of the Pol houses.

1.2 Rationale

Pols are the representation of the culture and traditions of the Walled City of Ahmedabad. Pols are where the roots of the city lie. The significance of the pols is not just in its architecture, but the culture, tradition and lifestyle it represents. Even today, the life in pols continues to thrive as it always has throughout the centuries. Hence, it is imperative to preserve these structures and neighborhoods.

“A values-based approach focuses on the values that society, consisting of various stakeholder groups/interest groups, ascribes to heritage. A value can be defined as ‘a set of positive characteristics or qualities,’ while a stakeholder group/interest group is ‘any group with a legitimate interest in heritage.’”

The approach of the preservation field is continuously evolving. The approach that once used to be materials-based has now evolved into a values-based approach.⁴ It is necessary to understand that the responsibility towards the preservation of the pol houses is not just of the

⁴ Poullos, I 2014 *The Past in the Present: A Living Heritage Approach – Meteora, Greece*. London: Ubiquity Press. DOI: <http://dx.doi.org/10.5334/bak>

owners of the houses. It is of the several stakeholders associated with them. Identifying and analyzing the gaps between the roles and the responsibilities of the stakeholders is the first step towards devising a strategy for the preservation of the pol houses.

A values-based approach tries to engage the whole range of stakeholder groups early on and throughout the conservation process, and resolve conflicts that inevitably arise between them assuring subjectivity and equity of conflicting stakeholders and different values

Mason and Avrami 2002, 19–23; De la Torre 2005, 4–8; Demas 2002, 49

Understanding the type of values that the stakeholders ascribe to the pol houses can contribute to an educational dialogue between the conflicting stakeholders. Today, more focus is given to this value-based approach and promoting the use of heritage as a social, economic and political tool. Despite that, there are many places where the process of conservation has become stagnant and is not a priority.

The preservation approach in the Walled City of Ahmedabad is top-down. The policies, incentives and regulations are laid down by the local government, and the owners of the Pol houses are expected to abide by them for the benefit of the heritage. Because of the poor economic condition of the people living in the pols, their priority is not the heritage of the city. The communication gap between the communities of the Walled City and the local government has led to the lack of understanding in the roles of stakeholders and the resulting lack of action towards the conservation and maintenance of the heritage. This situation demands immediate action towards finding solutions to solve the communication gap between the people and the government which in turn could lead to proper conservation of the pols and pol houses.

1.3 Research Objectives

The primary objectives of the thesis are:

- Understanding the current scenario of the pol houses
- Identifying the stakeholders
- Observing pol houses in the Walled City of Ahmedabad
- Analyzing the role of various stakeholders affecting the situation about the pol houses
- Providing proposal that facilitates the conservation and maintenance of the pol houses.

1.4 Methodology

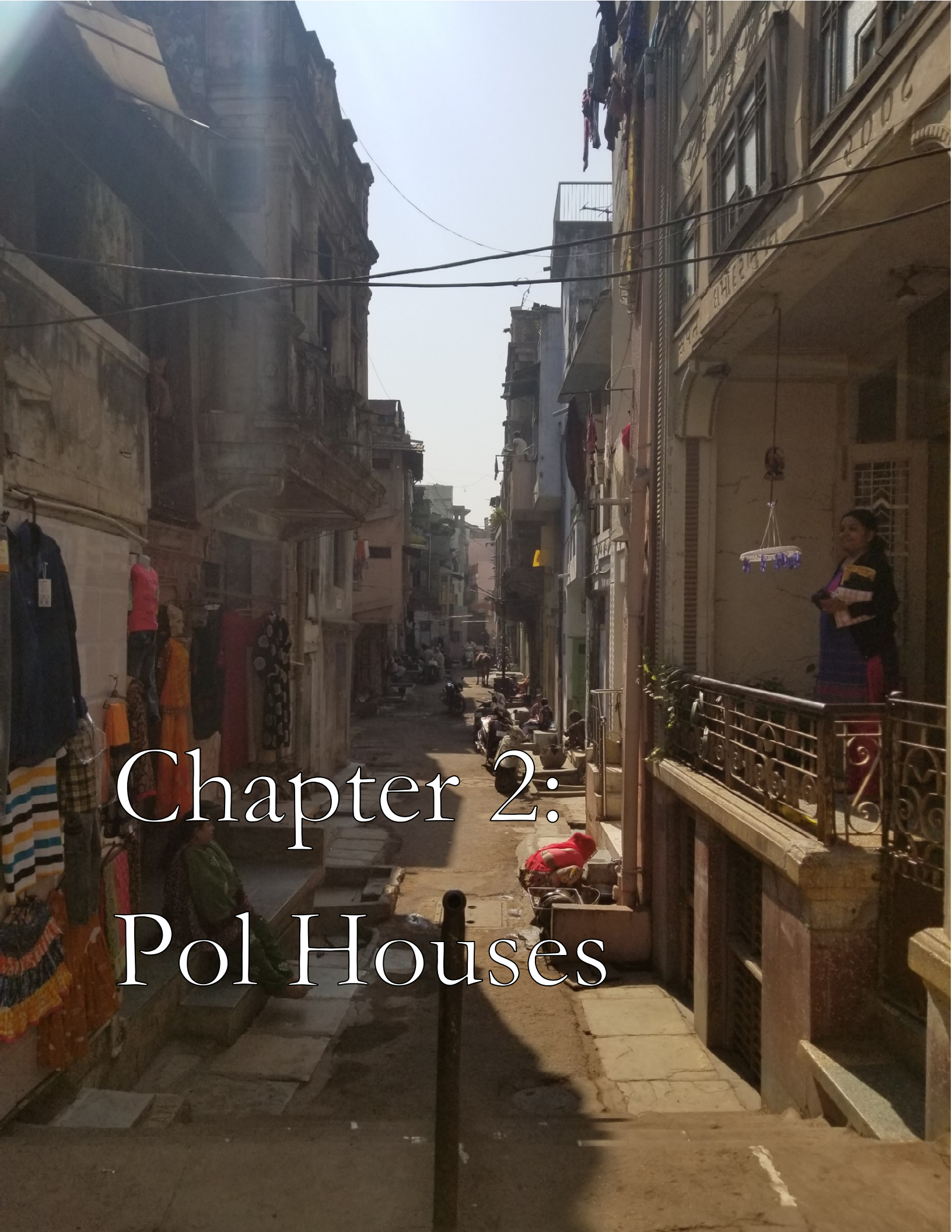
The thesis begins with the archival and historic research of the Walled City of Ahmedabad to understand the urban history of the city, the past preservation efforts made towards the conservation of the pol houses, the social history and the architecture of the pol houses. The literature research includes the assessment of the significance of the values associated with the Pol houses, the culture and the lifestyle of the pols and its importance in the life of communities.

The thesis further aims to understand the situation responsible for the lack of conservation and maintenance of these houses by analyzing the roles of the stakeholders

through their interviews and site observations. The analysis breaks down the situation leading to the deteriorating pols and the pol houses into factors organizing them into categories.

This analysis, in addition to different case-studies, would help in proposing a new framework that would facilitate improvement in the preservation practice in the Walled City of Ahmedabad. The proposal aims towards using the heritage as an invaluable resource for the socio-economic development of the people of the pols.

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Chapter 2: Pol Houses

2.1 Urban History of the Walled City of Ahmedabad

The history of Ahmedabad begins in the eleventh century. The *Solanki King Karandev I*, the ruler of *Anhilwara* (modern-day Patan) waged war against the *Bhil King Ashaval*. After his victory, he established a city called *Karnavati* on the bank of Sabarmati river at the location of the current city of Ahmedabad in the state of Gujarat. The Solanki rule lasted until the thirteenth century when Gujarat came under the control of the Vaghela dynasty of Dwarka.⁵ Ahmad Shah-I laid the foundation of Bhadra Fort, the first bastion of the city in 1411. He also established the first public square in the city, Manek Chowk. The grandson of Ahmed Shah, Mahmud Begada fortified the city with an outer wall, 10 km in circumference, which consisted of twelve gates, 189 bastions and over 6000 battlements to protect it from foreign invasion.⁶ It was during this time that the residential settlements were designed to protect the people of the city. The Mughal emperor Akbar then conquered Gujarat in 1573.

During the Mughal reign, Ahmedabad became an important center of trade, mainly in textiles, which were exported to as far as Europe. The city was later captured by Maratha generals, Raghunath Rao and Damaji Geekwad, in the years 1753, and the city came under the rule of Maratha dynasty. A famine in 1630 and the power struggle between the communities of the two generals, eventually led to the destruction of many parts of the city. The British East India

⁵ "AHMEDABAD CITY GUIDE." History of Ahmedabad - Ahmedabad City Guide. Accessed April 02, 2018. <http://www.ahmedabadguide.com/History.aspx>.

⁶ "Ahmedabad History." Ahmedabad History - Origin & History of Ahmedabad - History of Ahmedabad India. Accessed April 02, 2018. <http://www.ahmedabad.org.uk/history.html>.

Company took over the city in 1818 as a part of the conquest of India. A military cantonment and a municipal government were established in 1824 and 1858 respectively. In 1864, a railway link was established between Ahmedabad and Bombay, making Ahmedabad a critical junction in the traffic and trade between the northern and southern India. Many people migrated from rural areas to work in textile mills, making Ahmedabad a commercial hub. India gained its independence in 1947. Following the partition of India in 1947, the city was profoundly affected by the communal violence that broke out between Hindu and Muslims, the effects of the which are still prevalent in the Walled city today.⁷

2.2 Pols and the Pol Houses: History

The town planning of the city followed Islamic tenets during the foundation of the city during the 15th century. The residential settlements were established in a very similar manner so that the houses were close-packed, with common walls reducing the width of the internal streets so that people could see each other's faces in passing. Islamic tenets advocated such planning to promote better community associations resulting in a harmonious culture. These aspects of human relationships were also similar in local communities of Jain and Hindu, and so the settlement pattern was extended in the similar pattern in other communities too. The settlements were planned such that the mosques and temples were within walking distance of

⁷ "AHMEDABAD CITY GUIDE." History of Ahmedabad - Ahmedabad City Guide. Accessed April 02, 2018. <http://www.ahmedabadguide.com/History.aspx>.



Figure 1. A pol house



Figure 2. A typical interior circulation in a pol house

the communities.⁸ The entire settlement of the Walled city was divided into different neighborhoods consisting of dead-end streets that could be entered through a single gateway.

2.3 Pols and the Pol Houses: The Context and the Scenario

The pol houses are made of wooden posts and beams with an infill of bricks and lime mortar. In the 16th century, teak wood was imported from foreign countries by the merchants in the Walled City for the construction of their houses.⁹ The houses are two to three story high. The brick walls are not exposed to weather directly but are plastered on the interior and exterior. The basic plan of a pol house is linear, with a central courtyard. The pol houses share a common wall with other pol houses on both the sides along the longer walls. The entrance of the pol house is on a platform, also known as *otla*, which is a plinth with a row of columns that marks the limit of the house on the street. This entrance porch is used as a place for

⁸ Executive Summary, Nomination Dossier for inscription on the World Heritage list, Ahmedabad Municipal Corporation, January 2016.

⁹ This statement was a part of a conversation with the Commissioner of the Heritage department of the Ahmedabad Municipal Corporation during the field visit.



Figure 4. Central Courtyard in a pol house



Figure 3. Central courtyard and the area around it

communication with neighbors; washing dishes and clothes wherever the water is supplied through a tap on the street; and various religious activities.¹⁰

The planning of the house does not include designation of rooms with labels like “living room,” “bedroom” or “dining room,” but are flexible in use. The furniture and beddings are shifted from one room to another with the changing family composition or to find comfort during the changing seasons. The only exceptions in the flexible planning are the reception space right at the entrance, also known as bethak, which is used for visitors, the kitchen, the storage rooms for drinking-water and grains, and the prayer room. Because of the dense urban fabric of the Walled City, the central courtyards in the house are very important. All the other rooms of the house are built around the courtyard so that they receive maximum natural light and cross ventilation. In most of the houses, the size of this courtyard is about 60 to 100 square feet.

¹⁰ Ubbelohde, Susan, and George Loisos. "The Ahmedabad Pol House : Courtyard Strategies in a Hot-Dry/HOT-Humid Climate."

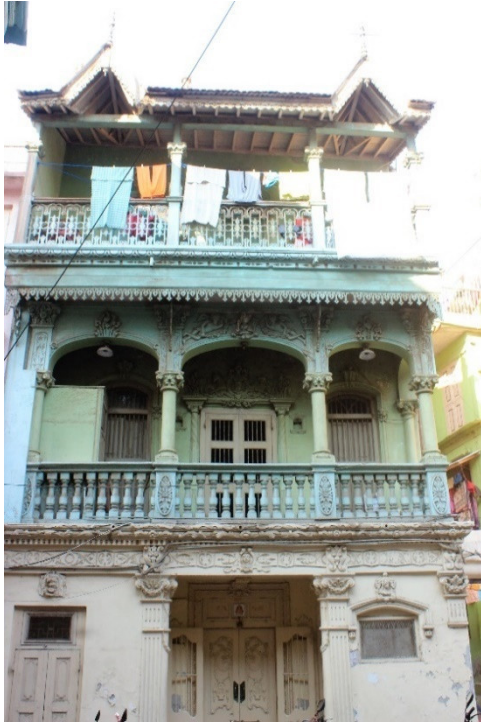


Figure 5. Ornamentations and details on the facade of a pol house



Figure 6. Details of the facade of a pol house

The semi-open (verandah) space around the courtyard is known as parasal and is one of the most utilized spaces in the house. This space serves as a connection between the private and semi-private spaces of the house. It usually comprises of a traditional Gujarati swing, a small washbasin and a sitting space. There are many religious festivities celebrated in this space because of its capacity to host a large number of people. The roof of a pol house usually varies. The traditional pol houses have sloped roof, made of wooden trusses and Mangalore tiles, which sheds off the rain during monsoon season, and provides a loft space for storage. Other pol houses have flat roofs made of cement and masonry which are used for drying clothes or sleeping during the summer season.

The exterior of the pol house is made of a wooden facade with brick masonry. The walls are made up of bricks. The shutters of doors and windows are made of wood; sometimes they are painted with different colors. Many traditional houses have wooden elements such as columns with ornate capitals, intricately carved bands

between two floors, colorful and carved railings of balconies, and brackets with detailed carvings of flora and fauna.

The streets of the pols vary in their widths. They are usually about 15 feet wide at the entrance of a pol. Moving along, the street opens up at a public square and disperses in different directions. The public square usually comprises of small tea stalls, snack shops, a decorated bird-



Figure 7. A typical scenario in a pol with the birdfeeder, a temple, people on their entrance doing some chores



Figure 8. Women washing clothes on the entrance plinth



Figure 9. A clothes business on the first floor and home on the second floor

feeder, and parking space for two-wheelers. The width of the dispersed streets is narrower than the main street. This network of streets also opens into smaller public squares, which usually consists of a bird-feeder and a small parking space.

“Birdfeeders - A saint traveling from Dakor to Dwarka sat by Bhadra Kali temple to quench his thirst. The saint was sad to see there was no provision to feed birds and other life forms. Moved by the saint’s lament, Babulal Modi, a grocer, built the city’s first chabutra.

Soon, the Shroff or Mahajan took up the task of building *chabutras* (bird feeders), chaat *patthars* (hollow stones) and water troughs throughout the Walled City. People living in pols would donate money or food as a profound gesture of compassion for Jeevdaya (respect for all life forms).

In the local lore, there is a belief that after death a person’s soul assumes the form of birds and animals. So by caring for birds, they also care for the souls of their departed ancestors.

Chabutras also reflect a rich synthesis of Hindu, Jain and Islamic architecture.

Most bird feeders follow a similar design: a wooden or stone platform covered by a dome and fixed atop a tall pole. Water and food are kept on the platform for birds to feed. Some chabutras are as tall as 15-20 feet.”¹¹

Majority of the pols have blackboards for various announcements, either at the entrance or in the public squares. As the streets go deeper into the pols, they become pedestrian. Some of the animals found wandering

¹¹ "Grocer Babulal Modi Built the First Chabutra in the City." Epaper.timesofindia.com. Accessed April 02, 2018. <http://epaper.timesofindia.com/Default/Layout/Includes/MIRRORNEW/ArtWin.asp?Source=Page&Skin=MIRRORNEW&BaseHref=AMIR/2010/02/26&ViewMode=HTML&PageLabel=60&EntityId=Ar05800&DataChunk=Ar06000&AppName=1>.

in the streets of the pols are cats, dogs, cows, and monkeys. During the day, the streets are occupied by women of all ages doing different chores like washing the clothes, cutting vegetables, sewing, or just talking to each other. In the evening, the streets are occupied by children playing on the streets. In the late evenings or night, the men of the households gather around at the public squares for talking.

2.4 Pols and the Pol Houses: The Culture and the Community

Historically, people living in a pol were usually of the same caste and religion. The pols were often named based on the castes residing in the pols, and the castes were based on the occupation of a group of people carried on through generations such as goldsmith, tailor, merchants, etc. There was no segregation of the rich and the poor, and people lived in harmony. There were very few pols which were occupied by people of different castes. Each pol had a temple, birdfeeder, and a well. Each pol had its council, elected by the people of the pols, called *panch*. The *panch* managed all the affairs of the pols which included solving any disputes between the families, gathering common funds from the people, making arrangements for different festivals, and doing necessary repairs in the pol. If a person in a pol wanted to sell his house, it was necessary to offer it to the people of the pols first, and then offer it to someone of the same caste.

“When a house was mortgaged or sold, the people of the pol had a right to claim an amount of 0.5 to 2 percent of the sale proceeds. On weddings and other ceremonial occasions, the pol residents were given a feast by the householder. Even if not of the same caste, the members of the pol were expected to attend a funeral whenever there was a death in the pol. If the pol rules were slighted, the offender was fined and

not allowed to light a lamp in the house or given a feast until the dues were paid. Money gathered from gifts, fines and the percentage on house property sales constituted a common fund, which was managed by the council or pol panch. It was used for repairing pol gates and privies or digging a pol well.”¹²

There seemed to be a successful system in place for the upkeep of the pols where people lived by rules and regulations. Most of the panch systems in the pols are no longer in operation. Today, what constitutes as a community has changed. Along the years, as the income of people increased, they started moving out of the Walled city in the hopes of better facilities and lifestyle. Over the years, this led to the incoming of people from the rural areas in search of better job opportunities. Most of the people in the pols have their occupation in the commercial streets of the Walled City. Some of the pol houses have been converted into warehouses or small-scale businesses. Some people carry out their business on the first floor of the pol house, while they live on the second floor.¹³

In the present day, the pols are occupied by people of different income groups, different castes and different occupations. Despite this diverse group of people living in a pol, they form a community based on their lifestyle, culture and traditions.¹⁴ People are very receptive to the new members coming in to live in the pols. The bond between the people develops deeper as they share different festivals such as Diwali, New Year, Holi, Navratri, etc with each other. Since the pol houses are organized along the streets, there is no privacy between the houses. Everybody is

¹² Ahmedabad : A society in Transition (1818-1914) Chp : Ahmedabad before the British, Pg 30-31

¹³ Nayak, Debashish . "Getting the City Back to the People Municipal Initiative in Heritage Conservation - The Case of Ahmedabad."

¹⁴ "Amdavadi Pols: The Doors That Still Welcome You." GoUNESCO | Go UNESCO. September 21, 2017. Accessed April 02, 2018. <https://www.gounesco.com/pols-of-ahmedabad/>.

aware of the happenings in the pol. As a result, people feel very secure living in the pols and develop trust and mutual respect among one another. Their similar lifestyle and their context make them a *community*. Because of their shared beliefs, the people in these communities can influence each other's way of thinking. This power of influencing each other can be a crucial resource that can be utilized to involve people in creating and spreading awareness about the importance of their heritage. Because of the poor economic conditions of many people in the pols, heritage is neither their priority nor their concern today.

The Walled City does not have many essential services like hospitals, libraries, community centers, provisions for tourists and other similar services. However, it has many vacant pol houses that are in a deteriorated state. There is a need to use these pol houses as a resource to serve the people of the Walled city. Most of the people in the pols would only be invested in valorizing and respecting the heritage if they receive direct benefits through heritage. Active involvement of people towards preserving and maintaining the heritage can be achieved by creating a sense of ownership among them towards heritage. The high number of vacant heritage properties provides the opportunity to use these properties as a tool to contribute to the socio-economic development of the people in the Walled City.

Creating awareness about the value of the city's heritage and the scope of opportunities that it can bring into the city can motivate the people to engage themselves to gain maximum benefits actively. The understanding of the significance of the different values associated with

the pols would facilitate in creating opportunities that would garner the most attention from people and lead to maximum integration between the different stakeholders.

Today, the preservation of the pol houses and the values associated with them is under the authority and management of the different stakeholders associated with them. The ownership of the structures in the Walled City and the responsible agencies for their management, protection and conservation needs to be understood to further analyze the factors affecting the conditions of the pol houses today.

2.5 Pols and the Pol Houses: Existing Governance

2.5.1 Ownership

The Walled City of Ahmedabad covers an area of about 536ha which is divided into approximately 65,000 parcels of land. The city comprises of residential structures called pols and commercial properties that are owned by individuals or joint owners. The different institutions, public spaces and other infrastructure facilities are owned by the Ahmedabad Municipal Corporation (AMC) and other State & Central Government departments.¹⁵ Many religious institutions are owned and managed by different community and religious trusts like temple trusts for Hindu and Jain temples, and the WAQF board is the Islamic trust.¹⁶

¹⁵ UNESCO, Historic City of Ahmadabad, Management Plan

¹⁶ https://en.wikipedia.org/wiki/Central_Wakf_Council

Some listed heritage monuments are owned by the Archaeological Survey of India (ASI) or Government of Gujarat (GOG). Most of them are owned and managed by the community and religious trusts.¹⁷

2.5.2 Existing Governance

The administrative authorities for the city on different levels are:

Central Government level

- Offices of Minister of Culture
- Secretary Culture
- Director General
- Archaeological Survey of India

State Government level

- Minister of Culture
- Directorate of Archaeology
- Chief Town Planner

¹⁷ Ahmedabad Municipal Corporation. "Historic City of Ahmadabad, Heritage Management Plan." UNESCO. January 2016. <https://whc.unesco.org/en/list/1551/documents/>.

District level

- Collector
- Elected representative to the Legislative Assembly
- Member of Parliament

City level

- Mayor
- Commissioner
- Heritage Conservation Committee
- Town Development Officer (TDO)
- Commissioner of Police Traffic

Ward level

- Elected Municipal Councillor

Community level

- Mahajan
- Pol Panchayat
- Residents committee

The nominated properties and the buffer zone are under the administration of AMC, the urban local body under the authority of the State Government. AMC works in cooperation with

Ahmedabad Urban Development Authority (AUDA) for the development of urban policies, framing and implementation of Development Plan and other legislative measures under the provisions of state and central government.¹⁸

AMC's governance structure is divided into two parts - political wing and executive wing.

The political wing: It comprises of elected local representatives under the leadership of the Mayor. This wing constitutes of boards and committees. They are the decision makers of the policies regarding the city.


The executive wing: It is under the leadership of a Municipal Commissioner. This wing is responsible for the execution of all plans and policies of local government including those of public health, sanitation, infrastructure development and maintenance, city engineering, cultural heritage conservation and overall management.

Heritage Department within AMC is the agency responsible for coordinating, planning and executing all tasks regarding conservation and management of cultural heritage of the city. It works in collaboration with other administrative authorities and management bodies as well as various stakeholder groups associated with heritage conservation and management.¹⁹

¹⁸ Ibid.

¹⁹ Ahmedabad Municipal Corporation. "Historic City of Ahmadabad, Heritage Management Plan." UNESCO. January 2016. <https://whc.unesco.org/en/list/1551/documents/>.

This governance framework has been responsible for the conservation and maintenance of the pol houses in the Walled City. These stakeholders have done much for the protection of the heritage of the Walled City. Today, the Walled City is losing the traditional pol houses that have many values ascribed to it. This increasing loss can happen when there are problems in the actions of these stakeholders, or when there is a lack of action for the protection of the pol houses. Extensive research needs to be carried out to understand the root of this problem.

A photograph of a traditional Indian building facade. The building has a light-colored wall with a balcony on the second floor. The balcony has a wooden railing with intricate carvings. The balcony is painted in shades of blue and white. The ground floor has a large wooden door and a window with a yellow frame. A person is sitting on the steps leading up to the door. To the right, another person is standing in a doorway. The text "Chapter 3: Methodology" is overlaid on the image in a white, serif font.

Chapter 3: Methodology

The thesis aims to understand the problems associated with the ongoing loss of pol houses, lack of conservation and irregular maintenance of the pol houses of the Walled city of Ahmedabad. The reason behind these problems can be understood through a comprehensive research process which includes:

1. Literature study
2. Field study and analysis
3. Scenario planning

The literature study includes the literature review of the history of the conservation practices carried out so far. It focuses on the emphasis given to the conservation and maintenance of the pols in comparison to that of the other monuments, the difference in the restoration process of the pol houses, and its effects on them. The field study includes visiting the Walled city of Ahmedabad - observing a site, identifying the stakeholders associated with the pols, interviewing them, and attending seminars on the Walled city of Ahmedabad. The data collected from the field is analyzed to define the factors affecting the conservation of the pol houses. These factors and the roles of the stakeholders are the main entities on which the scenario planning is carried out to propose the final recommendations.

3.1 Literature study

There is much research available on the pol houses- their construction, their significance, the current scenario, and the steps taken by the government towards their conservation. This

literature review focuses on analyzing the current conservation practices of the pol houses, or lack thereof, by various stakeholders in the city. The literature that is reviewed includes current government policies, research papers on the problems in the Walled City of Ahmedabad, articles on the types of conservation practices in India and the missions and practices of private NGOs.

Several agencies have made efforts for the conservation of the Walled City of Ahmedabad over the years. The city has introduced conservation initiatives since 1885. The initiatives then were inclined towards preserving the fort walls of the Walled city. The conservation process, carried out by the merchants and traders of Ahmedabad, consisted of raising funds for the “City Wall Restoration” movement. The movement was managed by a committee consisting of Government officials and citizens, but it was not a success, and the fort walls were not preserved. Today, it is only the gates of the fort walls that exist, and they are monumental landmarks through which the different parts of the city are identified.²⁰

Concerned with the rapid decline in the heritage resources, it was in 1984 that the Ahmedabad Municipal Corporation (AMC) with the help of the Ford Foundation, New Delhi, undertook a study to initiate policies for the conservation and preservation efforts in the Walled city.²¹ Ahmedabad, along with the cities of Jaipur and Hyderabad, were among the first that were chosen for this study and were provided grant by the Ford Foundation. By 1995-96, the residents

²⁰ Menon, Shailaja. "Urban Growth in a Colonial Framework: A Case Study of Ahmedabad, 1856-1919." June 17, 2014. <http://hdl.handle.net/10603/19382>.

²¹ Urban Heritage In Indian Cities - Slideshare, <https://www.slideshare.net/priyankarajani50/urban-heritage-in-indian-cities> (accessed April 03, 2018).

of the Walled city of Ahmedabad had started to campaign to stop the reckless destruction of the traditional havelis in the city. In 1996, AMC invited the Conservation and Research of Urban Traditional Architecture (CRUTA) Foundation, Calcutta, for helping it to propose measures for protecting the city's heritage. AMC, with the assistance of CRUTA Foundation, established a Heritage Cell within the Municipal Corporation in 1996. With this, the AMC became the first local government body in India to devise a Heritage Program and a comprehensive plan for the conservation and revitalization of the Walled city.²² Over the years, the different plans carried out by the Heritage Cell are:

- Walled City Revitalization Plan in 1997, which emphasized the need for updating the old heritage regulations for better control in the increasing density of the new construction in the old city.
- An advocacy was introduced for the restoration of pol houses, bird feeders, city walls and gates.
- Indo-French Cooperation
- AMC and the French Government signed a Memorandum of Understanding for rehabilitation of the Historic Centre of Ahmedabad. They jointly worked to document and create a database for 12,502 heritage properties, which were listed in 2001.
- Heritage center planned to aid and guide the owners of the heritage properties.
- AMC and French government collaborated with the Housing & Urban Development Corporation Ltd (HUDCO) to initiate a project called 'Enabling Communities to Invest in Heritage', which is India's one of the first models for a public-private partnership to enable historic city center preservation. HUDCO, along with the support from French Government, provided loans to heritage house owners at a subsidized rates interest, who otherwise were not eligible for housing loans according to the RBI guidelines, which do not provide housing loans to properties more than 15-year-old. T The Heritage Cell managed the project regarding approaching the owners and facilitating the loan procedure.
- A new clause has been added in the General Development Control Regulations (GDCR) prohibiting any heritage property to be pulled down without prior permission from the Heritage Cell in 2001.

²² INTACH. "Urban Heritage in Indian Cities." 2015. https://pearl.niua.org/sites/default/files/books/GP-IN4_HERITAGE.pdf.

- In 2007, a new amendment was introduced in the heritage regulations, which prohibited any development or restoration of a listed heritage property without the permission of the Heritage Cell.
- In 2010, the Government of Gujarat appointed a Heritage Conservation Committee for the Ahmedabad Urban Development Authority (AUDA), which is now guiding AMC in the process of heritage conservation.
- Other measures include a reduction in property tax for traditional buildings and reduction of FSI (Floor Space Index) from 3 to 1.8 to prevent high density and unplanned new development in the Walled City.²³
- In 2013, AUDA initiated a Tradable Development Rights (TDR) policy under which owners of about 1200 heritage properties could sell, transfer or lease out additional floor space index to developers in the form of TDR that can be utilized anywhere in the city. The funds generated through the sale of additional TDR should be then utilized for the conservation of their property.²⁴
- In 2015, Comprehensive Development Plan 2021 of General Development Control Regulations was proposed. Chapter 10 of the plan focuses on the Core Walled city.

It was important to mention these different conservation efforts made by the city to reflect on the limited number of regulations introduced towards the conservation of the pol houses up until today. While the 1997 Walled City Revitalization Plan updated the old regulations, no evidence proves that the plan succeeded in preserving the houses. The preservation effort made by the collaboration with the French Government did achieve its goal in the documentation and listing of 12,502 heritage properties. While the number of listed properties in each pol is available to the public, the database of their documentation is not. The initiative of providing loans to the

²³ Urban Heritage In Indian Cities - Slideshare, <https://www.slideshare.net/priyankarajani50/urban-heritage-in-indian-cities> (accessed April 03, 2018).

²⁴ Chauhan, Ekta. "How Ahmedabad Made It To The Elite List Of World Heritage Cities". Swarajya Read India Right ATOM. July 13, 2017. Accessed November 22, 2017. <https://swarajyamag.com/culture/how-ahmedabad-made-it-to-the-elite-list-of-world-heritage-cities>.

historic property owners to restore their houses by HUDCO and some other local banks under certain conditions was a seven-year program.²⁵ No article or documentation states the number of properties that were restored using this property loan in this period. There is an article “Conserving Ahmedabad’s Heritage” by Samanth Subramaniam published in 2010, giving an example of a pol house that was one of the first to receive the HUDCO loans. Mr. Nayak, who pushed for the law to provide a loan to historic house owners, explained in the article that 50 lakh Rupees worth of public properties were being restored at that time. He also stated that if an owner wanted to sell his property, he could acquire Rs 49 lakh for it, which makes it difficult to convince the owner to restore his house instead of selling, when the restoration would give him a tax concession of Rs 6000.²⁶ When the two statements, regarding the 50 lakhs worth of properties being restored and the cost of 1 property being 50 lakh, made by Mr. Nayak are observed, it seems that only one property has used the HUDCO loans. There is no information explicitly stating the number of properties that have used this loan facility.

The Walled City of Ahmedabad has about 16,000 pol houses. Not all the pol houses in a dilapidated state have government funds or policies at their disposal. According to the “List of Heritage Buildings within the Historic City of Ahmedabad” extracted from a survey of buildings undertaken for UNESCO World Heritage City Inscription Dossier in 2013, some of the historic

²⁵ Nayak, Debashish . "Revitalizing our Walled Cities." Accessed November 22, 2017. <http://www.india-seminar.com/2003/530/530%20debashish%20nayak.htm>.

²⁶ Subramaniam, Samanth. "Conserving Ahmedabad’s heritage." Livemint. July 13, 2010. Accessed November 22, 2017. <http://www.livemint.com/Politics/9r3ABC99NKGITzVPVOuEuO/Conserving-Ahmedabad8217s-heritage.html>

residential properties and the institutional properties in the pols have been classified separately in three grades based on their heritage value:

- Grade II-A Highest
- Grade II-B High
- Grade III Moderate

The physical condition of all the houses are categorized into three types:

- Good
- Fair
- Poor

The total number of structures (Except institutions) with heritage value within the Walled City of Ahmedabad is 2247, with 99 in Grade II-A, 552 in Grade II-B, and 1596 in Grade III. These structures are spread around 13 wards. Out of the 16,000 houses in the pols, the listed pol houses under these categories are the only ones which have heritage policies available to them.

According to that Dossier, some of the findings can be briefly mentioned as follows:-

- There are a total of 1573 residential houses mentioned as Listed Properties, out of which 453 are in Good condition, 696 in Fair condition, and 424 in Poor Condition.
- Of all the listed properties, there are a total of 99 properties in Grade II/A category (Highest Heritage Value), of which 73 are residential. Of these 73 residential properties, 27 are in Good condition, 31 in Fair condition and 15 in Poor condition.

- Of all the listed properties, there are a total of 552 properties in Grade II/B category (High Heritage Value), of which 383 are residential. Of these 383 residential properties, 124 are in Good condition, 164 in Fair condition and 95 in Poor condition.
- Of all the listed properties, there are a total of 1596 properties in Grade III category (Moderate Heritage Value), of which 1117 are residential. Of these 1117 residential properties, 302 are in Good condition, 501 in Fair condition and 314 is poor.

It can be seen from the above findings that majority of the houses are in Fair and Poor conditions, and hence, in need of conservation and maintenance. The conservation of these houses is entirely dependent on their owners. However, there is no mention of the occupants and owners of these properties in the surveys conducted by the AMC or in the document of the List of the Heritage houses. Finding the owners of many houses is a challenge in the Walled City because some owners have moved out of the Walled City, some have moved out of the country, and some owners do not care about the conditions of the pol houses in the city.²⁷ This has led to a severe lack of attention and maintenance of the pol houses and caused them to deteriorate. Without any action taken by the owners or the government towards restoring the deteriorated pol houses, the history and the foundation of the city of Ahmedabad is bound to fall apart.

In the entire document of the Comprehensive Development Plan 2021 by Ahmedabad Urban Development Authority, the incentive to conserve the heritage buildings has only been provided

²⁷ Nayak, Debashish . "Getting the City Back to the People Municipal Initiative in Heritage Conservation - The Case of Ahmedabad."

in one page of TDR policy, which lists the criteria to use it. The nominated Pol houses have certain tradable FSI available to them based on their Heritage Value:²⁸

Highest Heritage Value –	50% of total utilized FSI
High and Moderate Heritage Value –	30% of total utilized FSI
Non Listed –	Nil

This is the available FSI that can be used by an owner of a pol house of specific heritage value to utilize the TDR policy. As mentioned in the findings of the listed properties, there are only 99 properties with Highest Heritage Value, giving them the provision to sell 50% of their total utilized FSI. The remaining 383 houses with High Heritage value and 1117 properties of Moderate Heritage value have the provision to sell 30% of total utilized FSI. There is no indication of whether the amount gained through this policy would cover the cost to restore or maintain those pol houses.

As for the implementation and utilization of the TDR policy, there have not been many properties that have used this policy. According to a few “Times of India”²⁹ articles, there are six properties which have been issued the TDR certificate. These properties were awarded the certificate when the city was under the process of nomination for World Heritage City by UNESCO.³⁰ The TDR certificate can be issued to the owners who have already restored their

²⁸ Ahmedabad Urban Development Authority. "Comprehensive Development Plan 2021 (Second Revised) Part III, General Development Control Regulations." January 21, 2015.
<https://townplanning.gujarat.gov.in/monitoring/documents/dps-milestone-documents/08D2728415909D1Ejxxnknu5agx0.pdf>.

²⁹ The Times of India is an Indian English-language daily newspaper owned by The Times Group

³⁰ Tnn. "First TDR sale sealed - Times of India." The Times of India. October 10, 2017. Accessed November 22, 2017.
<https://timesofindia.indiatimes.com/city/ahmedabad/first-tdr-sale-sealed/articleshow/61027557.cms>

houses or who would be restoring the house through the compensation provided by TDR. However, after talking to Mr. Rajiv Patel, the co-founder of City Heritage Center and the person that has helped these six owners apply for the TDR certificate, it was brought up that the owners had already restored these six properties before the introduction of the TDR policy. They were issued the TDR certificate by the local Government to set an example for the public and reassure the owners that they would get the money to restore their houses and thereby motivate the other owners to use this policy. It has been four years since the TDR policy has been introduced, but no owner has applied for a TDR certificate with the intention to use the compensation for the restoration of their house. More analysis on the lack of use is discussed in the analysis section.

Some of the other institutions have been involved in the conservation of the Pol houses and their methodology can be explained below:

- City Heritage Centre – City Heritage Centre (CHC) is a community-based resource centre in the Walled City of Ahmedabad that helps the community in preserving, sustaining and promoting their architectural and cultural heritage. The centre provides “A single window solution” for restoration expertise, assistance in legal and financial resources as well as to draw up economic sustainability plans.³¹ Their goal is to create awareness (heritage walks and festivals), capacity building (short courses on skill development, research and

Ahmedabad Mirror. "Now, FSI trading turns tout-free." Ahmedabad Mirror. October 22, 2015. Accessed November 22, 2017. <http://ahmedabadmirror.indiatimes.com/ahmedabad/cover-story//articleshow/49486705.cms>

³¹ "About CHC." City Heritage Centre - About CHC. Accessed November 22, 2017. <http://www.cityhc.org/1/about-us>

documentation, creating database), heritage restoration (technical & legal aspects, commercialize supply chains for traditional materials, cost-effective alternative methods), and capital-intensive ventures (support owners with TDR buy-outs , tourism-driven home stays, eateries, cafe, spa, boutiques, attracting new economy business to inner cities).³²

- Hamari Virasat, the Mahila Housing Trust (MHT) promoted by SEWA – The MHT is trying to gather around women from Dhal ni pol to conserve heritage houses and public spaces. Under this project, MHT volunteers are training women of lower-income groups from Dhal ni pol to protect and preserve monuments in the Walled City. MHT has identified 100 properties, which are 100-200 years old. Ruchi Mehta, a city-based architect and a consultant with MHT, explained that the physical restoration mainly included conserving stone and wood carvings on doors and jharokhas of the pol houses. Other measures include restoring facades and cantilever structures, resolving water seepage problems and repairing basic wear and tear. As a part of the Trust's awareness programs, women were educated about the policies of AMC by submitting proposals of TDR for undertaking conservation projects. One part of the funding of their project was supposed to be available through TDR approvals, and Corporate Social Responsibility (CSR) was supposed

³² "About CHC." City Heritage Centre - About CHC. Accessed November 22, 2017. <http://www.cityhc.org/1/about-us>.

to provide the remaining part of the funding. So far, three proposals have said to be submitted and are awaiting approvals.³³

These are the only two organizations that were found to be working towards restoration and maintenance of the pol houses. While the CHC is solely focused on the restoration of the pols through community engagement, education, economic solutions, it is primarily focussed on pol houses. For CHC, *Pol house is the object*. Their goal is to make the pol houses self-sustaining by converting them into revenue-generating institutions. One of the concerns regarding their conservation approach is that even though they involve and engage communities, most of their acquired and restored properties have been converted into boutique hotels, cafes and other revenue generating functions. This makes their effort put into community engagement insubstantial since the pol houses being restored are not open to the local community for their use, but a tourist spot. CHC has also been involved in creating awareness about the different policies among the community in their pilot project, Dhal ni pol, and are in the process of convincing the owners to use the different policies and tools available to them.

On the other hand, MHT promoted by SEWA is a non-profit organization whose mission is to build sound housing and living environment for poor women in the informal sector. Their programs address basic civic and housing infrastructure needs, including water, sanitation, and

³³ "Pol women to turn conservationists - Times of India." The Times of India. September 25, 2016. Accessed November 22, 2017. <https://timesofindia.indiatimes.com/city/ahmedabad/Pol-women-to-turn-conservationists/articleshow/54504434.cms>.

secured land tenure.³⁴ For their program in restoring the pol houses, they have used *the pol houses as a resource* to generate employment for women. While this program may have limited funds, it is an example in which pol houses become a source of education, skill training, employment opportunities and utilization of policies. This project can garner more care towards the pol houses because the local community has a direct benefit by restoring these houses. Because of the severe lack of institutions working towards the preservation of the pol houses, they are in danger of becoming extinct.

To conclude, it can be said that while there are steps taken for the conservation and maintenance of heritage monuments in the city, there are insufficient steps initiated in the direction of the conservation and maintenance of the pol houses by the various stakeholders. There is also a need for incentives that would cause the stakeholders to act together towards a common goal. As can be seen in the review above, all the policies and steps taken by the different agencies have had a very singular approach. The policies and incentives need to be addressing different socio-economic issues impacting the people living in the Walled City. There is a critical need to address this lack of knowledge on how the pol houses can be utilized for public benefit before this precious heritage gets destroyed permanently.

The above claims are based on the literature research. These claims would be verified through the field visit and analysis of the site and the interviews with the various stakeholders.

³⁴ "Self Employed Women's Association." Self Employed Women's Association. Accessed April 03, 2018. <http://www.sewa.org/>.

3.2 Field Visit

The initial hypothesis on the causes of the lack of conservation and maintenance of the pol houses was the lack of awareness about the values associated with the pol houses among the people living there, lack of awareness about the policies available to them, and lack of action by the people living in the pols. However, it was necessary to consider that there were many factors and stakeholders responsible for the pols. The field visit aimed to observe the current scenario of the Walled City and understand the roles of the stakeholders through interviews to test the initial hypothesis. The field visit included:

- Choosing a pilot pol
- Observations made in the pol to determine the conditions of the pol houses
- Identifying the stakeholders associated with the pols
- Interviewing the stakeholders
- Analysis of the site and the interviews

It was essential to choose a pol that would be representative of all the other pols of the Walled City. However, there are 600 pols in the Walled City. A single pol could represent all 600 pols. Therefore, a pol which could provide the maximum knowledge about the current scenario of the Walled city was chosen. The pol that was chosen as a pilot pol was Dhal ni pol. Dhal ni pol is the second largest pol of the Walled City of Ahmedabad.

According to the “List of heritage buildings (Except Institutions) within the Historic City of Ahmedabad,” the total number of structures (Except institutions) with heritage value within the Walled City of Ahmedabad is 2247, with 99 in Grade II-A, 552 in Grade II-B, and 1596 in Grade III. The pol houses listed under these categories are the only ones which are found to have evidence of the historic elements on their facade or a historic facade, as observed from the streets before they were nominated by the municipal government. As for Dhal ni pol, the total residential structures listed as having heritage value are 168. Out of these 168 residential structures, two properties are nominated as having highest heritage value, 27 as high heritage value, and 139 houses as having moderate heritage value. From the above data, it can be said that Dhal ni pol consists of houses of all the three types of heritage value. Secondly, Dhal ni pol has been a pilot project for different stakeholder agencies to carry out their projects - a. Restoration of individual pol houses, and converting them into bed and breakfast, museum and homestays, b. Mahila Housing Trust (MHT) carried out surveys in Dhal *ni* pol to find out about the income group of people and provide them with housing loans, carrying out different interventions to preserve the heritage of the pol such as restoring the community well, tanka (water tank) system, etc. c. SEWA *ni* haveli is a center for design for the women of lower income group in Dhal *ni* pol.

To sum it up, since Dhal *ni* pol has several residential structures with all the types of heritage value in addition to the different interventions carried out by several stakeholders, it can serve as the site to study during the field visit. It has the potential to provide a vast knowledge on the current scenario in the pols, not only in the sense of observation of the pol houses but also

regarding the initiatives carried out by the stakeholders in the pol. Dhal *ni* pol also has the potential to provide an insight into how a pol would look like if it consisted of residential structures of all types of heritage values and the lifestyle of people in such a pol. The study of Dhal *ni* pol would provide an opportunity to understand the response of people towards the different interventions carried out in the pol and can serve as a case to learn from for the possible future interventions.

The field visit also included a seminar and a lecture series on the Walled City of Ahmedabad. The lecture series on heritage was part of the celebration of the city getting inscribed in World Heritage City list. The lectures in the series included - a) Approach toward the revitalization of old cities, b) Influence of Jainism on Heritage, Art & Culture of Ahmedabad, c) Medieval Architecture, d) Contribution of Parsi Community for development of Ahmedabad. The seminar that was attended was “ ‘What do we do next?’: Building on Ahmedabad’s UNESCO World Heritage Award” by Howard Spodek.

3.3 Identifying the Stakeholders

It is necessary to identify and understand the roles of the stakeholders, and how that has affected the conditions of the pol houses to understand the problems associated with the Walled City. The stakeholders associated with the conservation and maintenance of the pols are identified as:

1. Residents

- Owners – Owners have the authority to make changes to the pol houses. They are the ones who have the power to use the conservation policies made available by the Government.
- Tenants – Tenants constitute a significant population of the pols. While they do not hold power to sell the property or utilize the conservation policies provided by the government, they are the occupants of the houses. Their use of the property would directly affect the physical condition of the houses.

2. Government Officials

- Ahmedabad Municipal Corporation – This is the local governing body which regulates the properties nominated in the “Listed Heritage Property” document. This body consists of the Heritage cell which guides the owners and carries out heritage awareness programs like heritage walks, festivals, street dramas, etc.
- Heritage Conservation Committee – This is the state-appointed committee that assists the AMC and the heritage cell.

3. Developers, Investors, Public-Private partnerships and NGOs

4. Restoration Specialist

- Architects
- Conservation Architects
- Contractor
- Project manager

These stakeholders were interviewed as a part of the field visit. They were asked different questions to understand their take on the condition of the pol houses and the challenges that they face in their role. The questions in the interview were open-ended such that they would elicit discussions and stories from the stakeholders. The interview questions for each stakeholder were:

Owners and Tenants

A team of a few friends and family members were present to help conduct the interviews of the people living in the pol houses. Only the occupants of the listed pol houses were approached and interviewed. Of the 168 listed properties, people from 72 houses were interviewed. The goal of the interview was to understand the methods of conservation and maintenance that the owners of the pol houses adopted, and if they used the TDR policy that could help them financially in the restoration of their house. The owners and the tenants were asked the following questions:

1. Are you the owner or a tenant?

If Owner

2. How often do you need to maintain/repair your house?
3. What are the challenges you face in maintaining/repairing your house?
4. Have you considered using the TDR policy?
5. What are the positive and negative aspects of living in the pols?
6. What additional incentives do you think would help in conservation of pol house?

If Tenant

2. What are the positive and negative aspects of living in the pols?

Government Officials

Two committee members of the heritage department in the Ahmedabad Municipal Corporation and the chairman of the committee were interviewed. The questions for them

were:

1. How do you view the deteriorated conditions of the pol houses in the Walled city?
2. How do you believe that issue should be addressed?
3. How do you think could the TDR policy be used more efficiently?

Developers

A private developer, City Heritage Centre (CHC) and a not for profit, Mahila Housing Trust (MHT) were interviewed to understand what their goals were, what motivated them to invest in the pols, and the challenges that they faced while working in the pols. The questions for the developers were:

1. What factors do you consider while making business decisions regarding investing in properties?
2. What are your views on the pol houses as an investment?
3. How was your experience working on a pol house?
4. What are the additional incentives needed for the conservation of the pol houses?

Restoration Specialist

The restoration specialists include an architect, conservation architect, contractor and project manager who have worked on the restoration of the pol houses. The questions for the restoration specialists were mostly based on the challenges faced by them while working on a

restoration project, which were:

1. What are the physical issues that make the restoration of the pol houses challenging?
2. Are you aware of the TDR policy? How often is it used?
3. Are the available policies like TDR enough to cover the cost of the restoration?
4. What are the challenges you face while dealing with the owners of the pol houses?
5. What other incentives can be proposed for the better practice for the conservation of the pol houses?

During the field visit, many observations were made in Dhal ni pol. Many conversations took place with all the stakeholders. The findings from these were analyzed to determine the factors affecting the conservation of the pol houses.



Chapter 4: Findings

■ HIGHEST VALUE
■ HIGH VALUE
■ MODERATE VALUE



4.1.1 Streetscape and context



Figure 12. A team of family and friends standing at the entrance of Dhal ni pol to participate in the interviews with the owners

The entrance of Dhal *ni* pol is at the corner of one of the busiest roads of the city. An ornate canopy of a light brown stone marks the entrance to the pol. The entrance of the pol opens to the main street. The main street subdivides into branches along the way such that all the streets have a dead end. The pol houses are aligned on both the sides of the streets. The different local streets open up to public squares every once in a while. These streets are wide enough to let two motorcycles to pass at the same time. As one moves deeper into the pols, the streets get more pedestrian.



Figure 13. A small public square with temples showing unclean streets

During the day, the streets are occupied by women of all ages doing different chores likes washing the clothes, cutting vegetables, sewing, or just talking to each other. In the evening, the streets are occupied by children playing along the streets and in the late evenings or night, the men of the households gather around at the public squares. The public squares usually have bird feeders, sometimes in the corners and sometimes in the center of the squares. The public squares are usually busy with some people hustling



Figure 14. Pol streets showing lack of parking space

by, some hanging out around the birdfeeders and vendors selling tea and a variety of snacks. These activities during the different times of day are a depiction of the continuity of the culture, lifestyle and traditions carried on through the history of the Walled City. The evolution of the streetscape is evident in the dichotomy between the historic planning of the city and the modern amenities such as vehicles, modern construction, and wire cables inserted into the streetscape.



Figure 15. Unclean pol streets

Some of the main issues found on the streets of Dhalni pol were lack of parking space, the absence of sidewalks on the streets, potholes and dirty streets. The increasing population, and the resulting lack of parking space has led to many vehicles being parked around the birdfeeders, which has profoundly affected the artistic value of the heritage structure. The visual impact of the bird feeders in a public square has also been severely compromised. The absence of sidewalks on the streets has created a dangerous situation for the pedestrians. Since the streets are very narrow, the chances of a small vehicle accidentally touching the pedestrians while they are walking on the



Figure 16. No openings in the kitchen of a pol house

street are very high. Moreover, the streets are too narrow to incorporate sidewalks. While this is not a big issue for the locals, the situation is of high concern for providing safer roads for national and international tourists. The uncomfortable and inconvenient travel path would attract fewer tourists, which would impact the economy of the Walled City. Moreover, the high number of potholes and the dirty streets could lead to an unfavorable opinion of the Walled City. These minor issues can become significant when they overpower the heritage and prevent people from enjoying their time in the Walled City.



Figure 17. Dining space with no openings in the space

4.1.2 Issues in the planning of pol houses.

There are a few observations that could be made regarding the planning of a pol house. The toilet of the house is at the entrance, which causes a lack of privacy for women. The toilets were planned at the entrance to deal with plumbing lines during the earlier times efficiently. Secondly, the kitchen in most of the houses are at the rear end of the pol house, and hence there are no windows in the kitchen. This creates significant problems in getting the hot air out while cooking as well as technical issues

associated with the installation of modern appliances. These two issues are causing the younger generation to move out of the Walled city for better facilities.

4.1.3 Destruction due to the nomination for World Heritage List



Figure 18. A house that had heritage value stripped off of its historic facade after the city was nominated in the World Heritage list

Before the Walled City of Ahmedabad sent the documents for the nomination process in UNESCO's World Heritage list, the city prepared a set of documents to explain the significance of the Walled City. One of the documents was a map which marked all the buildings that were historic and had historic elements on its façade. These were marked in three categories based on their heritage value (Highest, High and Moderate). The map was produced in 2013.



Figure 19. Another house which had a heritage value that was converted into an apartment building

The site visit observed all the buildings that were marked as a historic building in Dhal ni pol. Out of all the 168 historic residential properties, two buildings were destroyed in the last four years. One house, with moderate heritage value, was completely torn down and converted into an apartment building. Another house, with high heritage value, was stripped off from its historic façade and converted into a cement building with a modern façade. Two houses were destroyed in just one pol. If similar

situation prevails in all 600 pols, the number of pol houses that could have been destroyed is astoundingly high.

4.1.4 Deterioration in the pol houses

A general theme was observed in most of the deteriorated pol houses. The common deteriorations found in the pol houses were:

- Structural Failure causing the elevation to skew;
- Replacement of the historic facade with the brick and cement façade;
- Loss of masonry wall;
- Failure in the load carrying capacity of the first floor;
- Structural cracks above the columns on the first floor;
- Rotten wood in the structure system as well as columns on the entrance plinth;
- Deteriorated conditions and loss of materials of windows and doors;
- Soiling on the ornamentations;

Even though the list of the deterioration conditions seems small, the damage to the pol houses was extensive.



Figure 20. A skewed second floor facade of a pol house



Figure 21. Structural crack at the bottom of the balcony and heavy soiling



Figure 22. Loss of historic door in an abandoned pol house



Figure 23. Loss of window panels

One of the most severe issues that were found was the skewed main elevation of the houses. Even though the houses were visibly tilted, they were still occupied. It is a very critical case of a safety issue that needs immediate attention by the local authorities and the owners. Most of the damage in vacant pol houses was structural failure. The loss of masonry on the façade of the vacant pol houses not only affected the visual impact of the heritage structure but also put the house in danger of being severely affected by the outside environment. This, in addition to the loss of shutters in doors and windows, could further damage the house and destroy the heritage property. The deterioration and soiling in the ornamentations made it impossible to truly understand and appreciate the details of the traditional historic art. This heavy soiling and the loss of materials on the facade severely affects the visual impact and the architectural value of the traditional historic construction of the Walled City of Ahmedabad.

These were the visual observations made during the visit to Dhal *ni* pol. To conclude, the primary issue is the

severe lack of maintenance of the pol houses and the streets. It is imperative to have the necessary visual stimuli to feel connected to the heritage of the city, which is drastically missing today. If these problems persist in the coming years, the pol houses are in danger of being uprooted.

4.2 Interviews with different stakeholders

This section describes the opinions that were provided by the stakeholders in the interviews regarding the conservation and maintenance of the pol houses, their roles and responsibilities and the challenges that they face in the same. These are solely the opinions and answers of the interviewees. No personal opinion is included in these sections.

4.2.1 Interviews with the Owners and Tenants



Figure 24. Interviewing the tenants and owners of a pol house with a heritage grade value



Figure 25. Interviewing an owner

The residence of 72 listed pol houses were visited for the interviews. Out of these, ten residents were tenants. One house was occupied by both tenant and the owner where the owner lived on the second floor and the tenant lived on the first floor. Six owners were not present during the interviews. Nine houses were vacant, and two were destroyed. Two of the oldest houses in this pol was 200 yrs old and 150 yrs old, both of which were occupied by the owners of the house. The longest that a family of a tenant has lived in a pol house is for 125 years, which constitutes of five generations of their family.



Figure 26. Interviewing an owner

"We enjoy living in the city. It is very safe and the neighbors are very helpful"

"Business is established in the city, and it is at a walkable distance. Living here is not expensive, the neighbors are very helpful, and the neighborhood is extremely safe"

"We have properties in the new city, but we enjoy living in the pols. We love the lifestyle, it is great for the kids, all the festivals are celebrated here, and the rooms in our houses are much bigger than those in the new city"

It is important to note that every owner and tenant in the pols were pleased to live there. They enjoyed living in the pols because of the close-knit relations that they formed with not only their neighbors but the majority of the people in the pols. People felt very secure living in the pols. They felt secure enough to leave their houses open to get something from the stores nearby. They trusted their neighbors to keep a watch on their houses. Additionally, since there was always someone sitting on the porch of their houses, it left no scope for theft in the pols. This applies to all the people living in the pols, irrespective of the fact that their house might not be a historic structure. Moreover, people living in the pols are very proud that the Walled City still stands as the primary place of attraction during the time of festivals. People valued pols and the pol houses for the kind of a space that it created in bringing them together and providing them a platform to share their life, cultures, festivals and joy with each other. It is because of this space and camaraderie between the people that the Walled City has sustained as a living heritage for six hundred years. This space that contributes in the sharing of culture is the most valuable asset of the pol houses.

“We last did repairing in the house in 2001”

When asked if and how often did they need to maintain their house; the answers were varied. A few owners did the maintenance of their houses as and when they could afford it. Some owners did the maintenance every 2-3 years. The maintenance was limited to re-plastering the walls, painting the interior and roof repairs. Most of the pol houses have not been maintained at all, or have been worked on twice in 20 years. The reason behind this was said to be the lack of

resources and affordability. Moreover, not a single owner knew about the TDR policy available to them. They also didn't know the meaning of "air rights." This is not to put the blame and ignorance on the part of the owners, but this lack of knowledge is the reflection of the level of information provided to the people.

The owners were also asked if they could think about any additional incentives that could be proposed for the conservation of the pol houses. In response to that, only one out of 72 interviewees answered the question. The owner suggested that the Government should pay half of the maintenance cost. Except for that, not a single owner had any suggestion for any sort of incentive. This indicates the lack of an educational dialogue between the owners and the governing stakeholder responsible for the conservation of the pol houses. People had no opinion whatsoever towards the condition of the houses and its conservation.

4.2.2 Interview with Restoration Specialists

Restoration specialists were mainly asked about the challenges that they faced during the restoration of pol houses. According to restoration specialists, there is a lack of availability of the natural materials like wood. This has led to an increase in the price of wood and the people living in pols cannot afford to buy it. The new construction technology is shifting from brick and timber to brick and steel contributing to an increasing loss of pol houses with historic structure.

One of the planning issues that most restoration specialists face often is the shared walls between the pol houses. During any restoration project in a particular pol house, there is always a need for proper shoring system. Additionally, there are times when a house is subdivided into different sections to accommodate more than two families. This leads to putting up more walls than what the structural system can handle which leads to cracks and structural failure in the house. Lastly, there are times when just a small segment out of the entire house is a listed property of heritage value. That situation makes it difficult to restore the house because the heritage property cannot be damaged or changed without prior consent from the local government. Since the process of consent takes time, the owners are unwilling to go through the process to save the historic fabric. These partial historic fabrics in a pol house end up getting destroyed. No actual count to the total number of destroyed houses exist.

One of the major problems faced by the restoration specialists is the lack of affordability of the owners. In addition to the high cost of restoration, the fee of the restoration specialists makes the entire process too expensive for some owners. Moreover, according to the restoration specialists, the TDR policy provided to the owners is not enough to cover the cost of a restoration project. Because of these reasons, the owners of the pol houses do not consult a restoration specialist. It is usually the other way around. The restoration specialists are the ones who approach the owners requesting them not to sell or tear down their house and offer to provide them the necessary consultation and designs in affordable price to preserve the historic property. It is evident from the interviews that the state of the condition of the pol houses is entirely

dependent on the owners, and their willingness to put an effort in their preservation is low on their list of priority.

4.2.3 Interview with the City Officials

Two committee members and the Chairman of the Heritage Department in the Ahmedabad Municipal Corporation were interviewed for their opinions on the current condition of the pol houses, their thoughts on the current TDR policy in place and their opinions on what needs to be done for better conservation and maintenance of the pol houses.

Starting with the condition of the pol houses in the Walled city, the priority for the city officials is the issue of the lack of privacy because of the poor placement of the toilets and the kitchen. According to the officials, if the bathroom and kitchen facilities are improved, people, especially the younger generation, would enjoy living in the pols. In addition to the housing fabric, the streets of the pols were historically designed for pedestrian activities and were never designed for the current population and the vehicular traffic. The total housing stock in the Walled City is 16,000, and the officials still face a demand for affordable housing because of the people migrating into the city from the rural areas. While the provision for affordable housing is made through new construction, these incoming groups of people do not know the rich history of the Walled City. The increasing demand for the affordable housing and the lack of available land in the dense fabric of the city has left no other option but to consider using the pol houses as a resource. Moreover, the need for cleanliness in the pols was also emphasized by the Commissioner.

According to the officials too, the current TDR policy is not enough to cover the cost of the maintenance or restoration. The amount provided through TDR is minimal. According to the City Officials, there needs to be some policy where if a person has 100 sqm, the person would be entitled to a TDR amount for 200sqm. For the maximum utilization of the TDR policy, the officials also think that making it mandatory for the developers to buy TDR from heritage properties would bring in more people to use the policy.

One of the critical issues that threaten the use of any financial policy or incentives is that if an owner sells his historic property, he will gain about 50-60 lakhs (INR), which is significantly high compared to any amount received through loans, subsidies or TDR policy.³⁵ There is a need for a policy or incentive that can compete with these odds.

4.2.4 Interview with the Developers/Investors/NGOs

Two different types of agencies were interviewed:

- a. City Heritage Centre: community-based resource centre which is a private agency
- b. Mahila Housing Trust (MHT): An autonomous organization promoted by Self Employed Women's Association (SEWA)

There are a few challenges faced by the private developers who are interested in buying the TDR from a heritage property. Firstly, one of the significant challenges is the joint ownership

³⁵ 1 USD = 63.85 INR

issue. Most of the heritage properties are owned by more than one person because of the large number of family members. If a private developer is interested in buying the air rights from a particular house, he would need the signatures from all the owners of the house. This becomes challenging especially when some of the owners have left town or country. There are times when the developer gets caught up in between family disputes which delay his entire project. Secondly, the area acquired from one pol house is not enough for a developer to build an additional floor in an apartment building outside the Walled city. The developer would need to buy areas from many pol houses to acquire the area which is sufficient to build more floors outside the city.

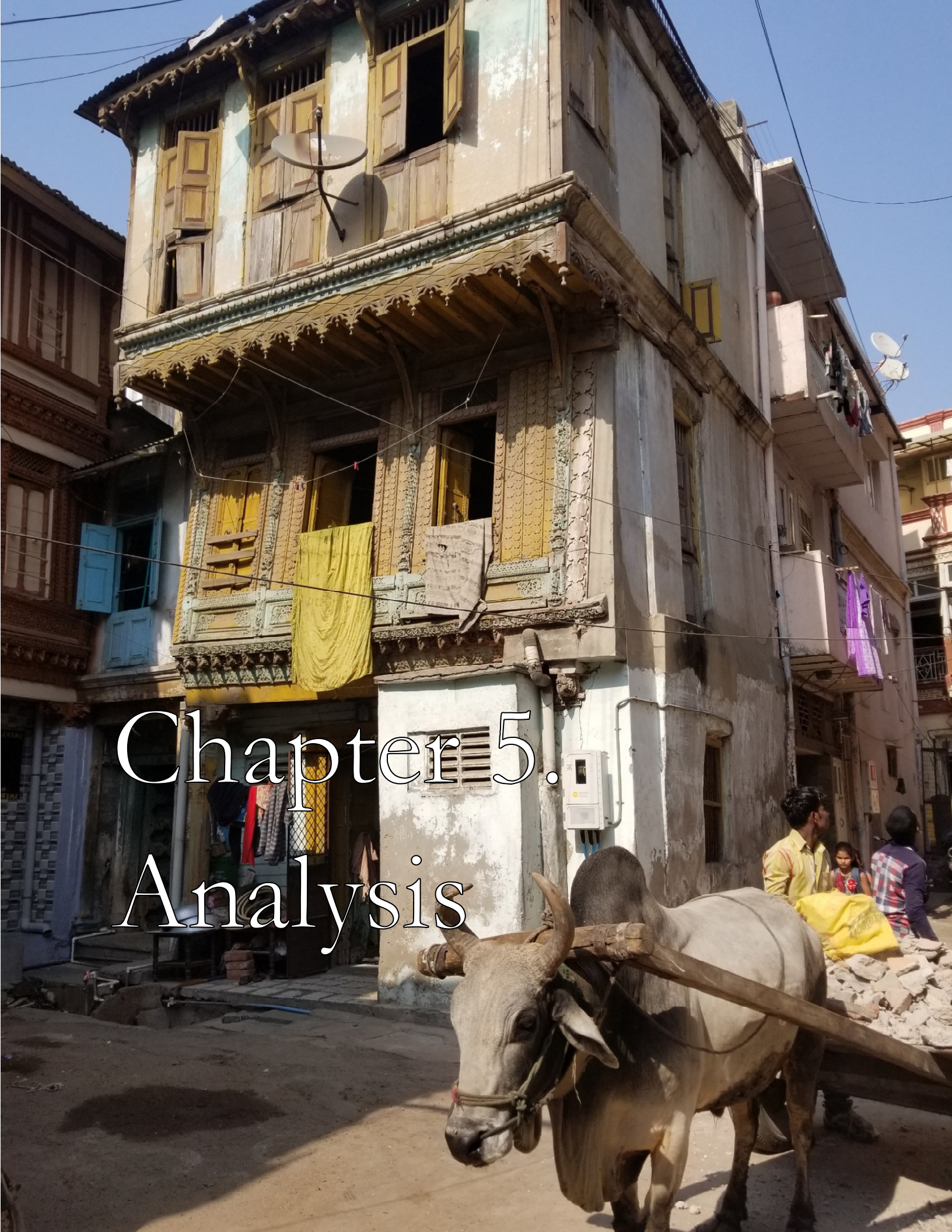
There are also private investors in the Walled city who are interested in the heritage of the city. They prefer to purchase the historic properties with the goal to find solutions that would preserve the historic buildings along with making them a successful business investment. These investors approach the owners of a vacant or dilapidated pol house, negotiate with the multiple owners to buy the property from them, and carry out the adaptive re-use of these properties. Most of these properties are converted into museums, bed & breakfasts, cafes or hotels. The goal of these investors is not just monetizing the heritage property, but to protect and restore the heritage property and provide examples of design solutions where the pol houses are restored with all the modern amenities. However, investing and restoring a damaged pol house is very expensive. A private investor can invest only in a limited the number of houses. These private investments are not enough to bring about significant changes in the current scenario of the pols today.

The Mahila Housing Trust(MHT) is an autonomous organization, promoted by SEWA, whose mission was to build sound housing and living environments for poor women in the informal sectors. Their programs mainly address basic civic and housing infrastructure needs, including water, sanitation, drainage, solid waste management, roads, electricity/energy, low-income housing and secured land tenure. MHT thought that the people in the pols would benefit from the TDR policy. So, they surveyed to understand the different income groups in the pols. All of them were a low-income group. 84% earned less than 15k per month. They needed help regarding policy, and also in creating awareness about it. ³⁶ MHT works with a goal to improve the living environment for the people in the pols. According to them, the people should not be deprived of using air-conditioners, television, toilets, etc. They aim to use heritage to improve the living conditions of the people. One of the challenges that they faced was that if the people did not see themselves benefitting out of something, they did not bother with it. There were issues regarding documentation of houses, joint ownership issues, family disputes, women being timider than men, and men not allowing women to speak up. These issues have restricted and delayed actions for the MHT.

To conclude, every stakeholder has their issues and challenges preventing them from protecting the heritage of the Walled City. Observing the physical condition of the pols and the pol houses, and talking to the stakeholders, it is evident that the situation in the pols is alarming and it would be very complicated to deal with it. The pol houses are severely affected and will continue to deteriorate because of the complexity of the problems and lack of action by the

³⁶ Bansal, Prachi. "Conservation of Urban Areas with Heritage Value in Indian Cities : Case of Ahmedabad."

stakeholders due to several reasons. The situation cannot be solved unless the roots of the problems are identified and analyzed, and the issues affecting the heritage of the city are understood objectively and adequately.



Chapter 5. Analysis

The analysis includes the identification and the assessment of the values associated with the pol houses as identified by the different stakeholders, and the categorization of the issues affecting the conservation and maintenance of the pol houses. The values associated with the pol houses are based on the interviews with the different stakeholders. The issues related to the lack of conservation of the pol houses, are categorized into the different factors affecting the pol houses. The assessment of the factors is based on the conclusions derived from the opinions of the stakeholders regarding their roles and responsibilities, and the observations made during the interviews in the field visit.

5.1 Pols and the Pol Houses: Assessing the significance of the values.

“Value assessment presents a threefold challenge: identifying all the values of the heritage in question; describing them; and integrating and ranking the different, sometimes conflicting values, so that they can inform the resolution of different, often conflicting stakeholder interests.”³⁷

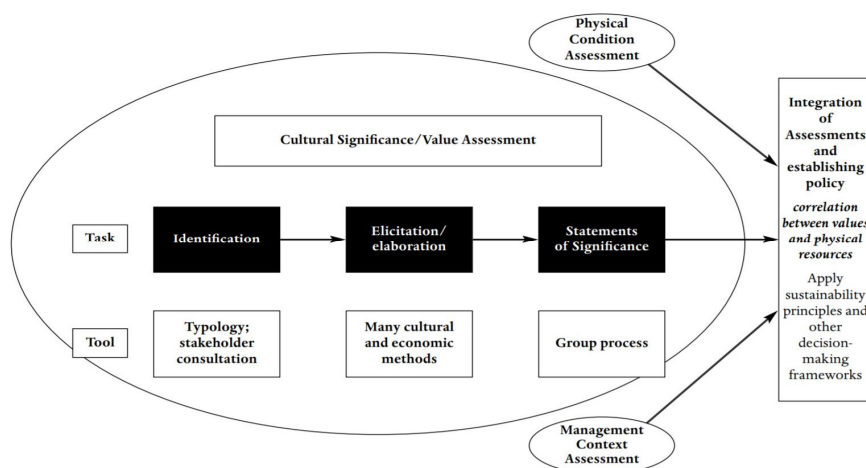


Figure 27. The cultural significance value assessment process by Getty Institute

³⁷ Torre, Marta de la. *Assessing the Values of Cultural Heritage*. The Getty Conservation Institute, Los Angeles, 2002. https://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/assessing.pdf

The significance of heritage can be determined by the assessment of the values that the different stakeholders ascribe to it. These values can be historic, aesthetic, cultural, social, economic, age, use, and many more. The type of value that can be ascribed to the heritage depends on the person ascribing the value to it. Each stakeholder can assess his own set of values that are significant to them. Integration of these assessments can lead to the prioritization of the values that need to be preserved. In the case of the Walled City, the values ascribed to the pol houses by the various stakeholders can be recognized by studying the interviews with them. These values can be categorized as:

- Social value: The continuity of the pols in the form of an urban settlement is because of the occupants maintaining the culture and traditions. It is because of the culture, lifestyle and the shared spaces between the communities that the people enjoy living in the pols. People value the pols because of the inherent sense of belonging they feel in the space where people look out for each other as if they were their own family. These cultures, traditions and festivities are represented in their purest form in the pols, and people from all over the place come together to celebrate these cultures and traditions. This social value is the primary reason that the Walled City has thrived as a settlement and will continue to do so as far as the communities live in social cohesion and shared values.
- Historic value: The settlement of the pols has been established in the Walled City since the 15th century. The footprint of the settlement pattern and the plotting of the houses in the pols is an important attribute that has been more or less preserved in its character.

There are certain aspects in the pols that have seen changes and decay over time because of the influences of western culture and the needs for modern amenities. However, the character of the pols, the circulation patterns, the culture, traditions and the lifestyle of the pols have remained the same. The history of the pol houses is evident in the architectural style, carvings, ornamentations and details.

- Aesthetic value: The aesthetic value of the pols lies in the architectural beauty of the Pol Houses and the surrounding context. The pol houses are a representation of the wooden architecture with its wooden post and beam construction, intricately carved wooden doors and windows, ornamentations, brackets and the details carved in the beams of the courtyards. The influence of various rulers and their architectural style can be found in the pol houses and is a representation of the journey of the Walled City towards independence.
- Scientific value: The scientific value of the pol houses lies in the construction technology. The structural system of the post and beam structure of the pol houses was strong enough to withhold the massive earthquake that caused extensive destruction across the city in 2001. The pol houses sustained much less damage than the modern buildings because of the way the houses are clustered, the proportion of mass and the construction method employed. Some of the features that highlight the science and technology behind the resistance to an earthquake can be understood from a study done by the Centre for Environmental Planning and Technology (CEPT) University:

- Wood: Wood, being a light-weight material, was beneficial since the impact of an earthquake is directly proportional to the weight of the structure. Wood is a ductile material and its cellulose fibers increase its capacity to undertake tensile stress.
- Flat bricks: The flat bricks used in the construction of the pol houses are resistant to earthquakes because they are stable against overturning. The bonding material used for the masonry is a mixture of mud and cow-dung or lime. This mortar allows a certain degree of movement and adds to the plasticity of the walls.³⁸
- Stone: Stones were used to form a base in the columns and the doorframes. It allowed for them to move to and fro during the earthquakes reducing the impact of the lateral forces.³⁹

The construction technology of the Pol houses makes them a highly valuable source of knowledge for the current and future generation. It is essential to learn, remember and pass on this construction and materials skill for the continuity of the heritage, and an invaluable source of inspiration for the new construction technology.

³⁸ Yumlembam, Dayananda. "Pol Houses More Quake Resistant than Modern Buildings: Study - Times of India." The Times of India. October 24, 2011. Accessed March 23, 2018.
<https://timesofindia.indiatimes.com/city/ahmedabad/Pol-houses-more-quake-resistant-than-modern-buildings-Study/articleshow/10481028.cms>

³⁹ Yumlembam, Dayananda. "Pol Houses More Quake Resistant than Modern Buildings: Study - Times of India." The Times of India. October 24, 2011. Accessed March 23, 2018.
<https://timesofindia.indiatimes.com/city/ahmedabad/Pol-houses-more-quake-resistant-than-modern-buildings-Study/articleshow/10481028.cms>

These four values listed above are the fundamental values out of which different values can be interpreted and integrated for the benefit of the communities and the heritage. Prioritizing these values based on their significance would result in the resolution of varied stakeholder interests in the conservation of the pol houses. The social value of the pol house can be the most significant value because it is the driver of the continued use of the Walled City as an urban settlement. Without the continuity of the social attributes of the Walled City, the pols would not continue its historic function. It is the people of the pol houses that are responsible for the continuous use of the pol houses, and what they value the most in the pols is the social cohesion and the spaces that provide them a platform to share their culture, traditions and lifestyle. The historic value and the aesthetic value are interdependent and are equally important. The architecture of the pol houses is the representation of the historical events that the city has faced and overcome. The scientific value of the pol houses is essential for the continuity of knowledge and inspiration for the construction technology that has proven to be successful in the face of earthquakes. It is crucial to preserve all the four values because their simultaneous prevalence in the Walled City has resulted into the pols persisting as an urban settlement even after six centuries.

5.2 Factors affecting the pols

Many factors are responsible for the deteriorating condition of the pols in the Walled city. These factors affect the current conditions of the pol houses directly and indirectly. They can be categorized as:

1. Physical issues associated with the pol houses
2. Social issues
3. Policy and Planning
4. Lack of infrastructure and services
5. Environmental effects

5.2.1 Physical issues associated with the pol houses

Some physical factors have resulted in the deteriorated condition of the pol houses. The irregular maintenance of the houses by the owners is one of them as determined from the interviews. This, in addition to the natural aging of the building, has severely affected the condition of the materials and the structure of the pol houses. Over the years, the population has increased in the pols, and the resulting number of occupants in each house has increased. This has led to an increase in the live load on the structural system of the building. As a result, many



Figure 28. Owner of the pol house with highest heritage value talking about lack of trained workers for restoring their mosaic flooring

pol houses are under the threat of structural failure caused by tilted wooden slabs of the second floor and bending of the wooden beams.

Secondly, there is a significant lack of the availability of the traditional materials. The size of the historic bricks was smaller than the

standard bricks today (19cm X 9cm X 9cm). Today, the standard bricks are cut using a machine that cuts one brick at a time and is then given a shape to resemble a historic brick, by the laborers manually. This manual construction process significantly affects the completion period of a project, and hence increases the resulting cost of a project. Similarly, the wood is available scarcely, and therefore its cost is very high. According to the restoration architects, even the quality of the new wood is usually not as good as the historic wood. The low-quality new wood sometimes causes the damage to the historic wood. Lastly, there is a lack of trained and skilled workers. Some pols have patterned mosaic floors, while some pols have intricate wooden carvings. One of the pols with the highest heritage value had a mosaic flooring with colorful patterns. When the owner was asked if it was convenient to find people to repair and maintain the flooring since some of the mosaics was chipping off, the owner claimed to have kept the repairing on hold since they could not find anyone with the skill set to repair the flooring.

To summarize, there is a severe lack of workers who are skilled and trained in the conservation and repairs of the pol houses. There are no standards or protocols that regulate the materials to be used and the repair techniques that need to be employed for the proper conservation of the pol houses. Lastly, there is a lack of availability of the historic materials, and no research on alternative solutions has been done. There is a need to explore more sustainable options for the traditional historic buildings.

5.2.2 Social Issues

One of the most critical issues that the Walled City faces today is the lack of integration of the different stakeholders. No two stakeholders are aware of what the other is doing and what they define as their concern. World Heritage inscription requires pre-approved permissions from the owners of the site that is nominated. The government in the Walled city of Ahmedabad did not undertake this step. This may have been because the total population of the Walled city is about 400,000 people. Reaching out to that many people would have delayed the nomination process for a long time. The people in the Walled City have not been provided the knowledge about the regulations about the World Heritage inscription. This is leading to people tearing down their historic houses in the fear that they would not be able to change the facade or sell their house because of the nomination. This profound misunderstanding has led to devastating results on the pol houses. The document of the listed property was prepared in 2013 for the submission for the nomination of the Walled City for World Heritage nomination. Within four years of this nomination process, two pols in Dhal ni pol itself have been uprooted. One of them is converted into an apartment building, while the other pol house has undergone a complete transformation in its historic fabric. There is an urgent need for stopping this destruction which would eventually ruin the heritage of the city.

The pol houses were not planned considering the needs of the current times. The current planning neither provides privacy to people while using toilets nor does the kitchen facilitate

modern appliances and proper ventilation. This lack of services has facilitated the younger generation to move out of the Walled city for houses that provide modern amenities. Today, there are nine vacant pol houses just in Dhal ni pol. Two of those are in danger of falling apart.

Another reason that is leading the younger generation to move out of the pols with their families is that many men in the Walled City are not able to find a woman to marry who is willing to live with them in the pols after marriage.⁴⁰ The reasons for that could be the lack of cleanliness of the streets of the pols and the lack of maintenance and conservation of the pol houses. According to the Commissioner during his interview, if the problem of cleanliness were solved, going into the pols would become more appealing.

A number of siblings usually own a pol house. This joint ownership of the pol houses creates many obstacles while applying for different policies. It even creates problems when one of the many owners is interested in restoring their house, but if the other owners do not agree to pay for their part, the project comes to a halt.

There has also been no communication between the city officials and the owners of the pol houses for the promotion and the education regarding new policies that are introduced in the city. Moreover, the owners do not approach restoration specialists for either guidance or to appoint them for a restoration project. It takes months for private investors to navigate and negotiate with the owners to invest in a project. One of the fruitful stakeholder relations was

⁴⁰ In India, a woman moves into the husband's house, usually with his family, after marriage.

found between restoration specialists and the city officials. Because of the limited number of experts working in the pols, there has been continuous positive relations and interactions between some of these stakeholders. This suggests that the governance framework in the Walled City is very top-down and there is a need for better integration of all the stakeholders.

However, people in the pols are very united among each other. They value and approve of each other's opinions much more than that of the government. Before making difficult choices, people usually take the opinions of their neighbors. As mentioned before, men and women socialize with each other during different times of day. It is during these social gatherings every day that people discuss issues that bother them or an experience that they were pleased of. These social gatherings have the potential to shed light on the importance of the conservation and maintenance of the pol houses. Inciting educational dialogue regarding the heritage in these daily gatherings can make a huge impact in the general opinion of the people for the pol houses.

To summarize the social issues, without the sharing of information and integration between the stakeholders, the pol houses are in great danger of being wiped out from the city. However, there are scopes within the city itself that can contribute in addressing this issue. The lack of modern amenities is facilitating the younger generations to move out in search of modern apartments. The vacant pol houses have no purpose in the Walled City today and no one to care for them. Lastly, without benefiting directly from the pol houses, the people in the Walled City are not inclined to invest their time and resources in the conservation of the pol houses.

5.2.3 Planning and Policy

One of the main problems affecting the development in the Walled City is that the government has not laid out the short term and long term goals for the city. This lack of vision gives the city no aim to achieve and no direction to follow. The lack of vision has a critical impact not only on the conditions of the pol houses but also on the socio-economic development of the Walled City. Without these goals, the city becomes stagnant. It is essential for the stakeholders to come together to develop a short term and long term vision for the city to preserve the heritage of the Walled City.

A huge limitation in the planning and policy department of the city is the absence of documentation of the heritage buildings. No documents or drawings of the pol houses could be found online. Without documentation of pol houses, the destroyed buildings are forever lost. Moreover, the land use map of the pol houses in the Walled was not available too. This map is the basis for understanding the scope of development and utilization of the heritage resource for the communities of the city. Without such a map, there is no way to understand and analyze the requirements of the people of the city.

The only regulations and incentives that the Walled City currently has for the conservation and maintenance of the pol houses are:

- Other measure includes a reduction in property tax for traditional buildings and reduction of FSI (Floor Space Index) from 3 to 1.8 to prevent high density and unplanned new development in the Walled City.⁴¹
- Comprehensive Development plan 2021, General Development Control Regulations, Chapter 10.⁴² In 2013, AUDA initiated a Transfer of Development Rights (TDR) policy under which owners of about 1200 heritage properties could sell, transfer or lease out additional floor space index to developers in the form of TDR that can be utilized anywhere in the city. The funds generated through the sale of extra TDR should be then utilized for the conservation of their property

The tax structure of Ahmedabad has a few critical issues. In the Walled City, the bird-feeders are considered commercial buildings and are taxed accordingly. This is a serious issue since they are public properties and no revenue is generated through them. Moreover, the vacant properties are taxed less, which causes many owners to keep their properties vacant. The condition of such vacant heritage properties is severely affected because of the lack of use and no maintenance.

Secondly, there are a limited number of policies and regulations that control the use of the pol houses and the changes that can be made to the pol houses. No clear agenda defines the limits of the extent to which a pol house can be reformed. Moreover, there are no consequences for the people who do not follow any regulations or who tear down the historic fabric. This could

⁴¹ Soni, Miral. "Conservation Planning in France & Urban Conservation of Ahmedabad." LinkedIn SlideShare. March 16, 2017. Accessed April 04, 2018. <https://www.slideshare.net/Soni3010/conservation-planning-in-france-urban-conservation-of-ahmedabad>.

⁴² Ahmedabad Urban Development Authority. "Comprehensive Development Plan 2021 (Second Revised) Part III, General Development Controls Regulations." January 21, 2015. <https://townplanning.gujarat.gov.in/monitoring/documents/dps-milestone-documents/08D2728415909D1Ejxxnknu5agx0.pdf>

be because of three reasons - a. The consequences of not following the regulations have not been defined, b. Lack of regular monitoring by the city officials and hence, the lack of knowledge regarding the actions taken illegally, c. The owners of the pol houses are not aware of any policies and the regulations that the government has introduced.

Moreover, the people have shown distrust towards the government. The general attitude of the people towards the government is that they do not do anything for the benefit of the people, they unnecessarily drag the process of the implementation of any policy process which takes years to provide any beneficial services and they do not approve of any documents quickly. For instance, during the interview with one of the committee members of the Heritage department in AMC, the committee member gave an explanation on the process of TDR for heritage properties. The Heritage department does not deal with the TDR policy. AMC has another department specifically for TDR.⁴³ This department is responsible for handling the paperwork and the document approvals. However, if the TDR is applied to a heritage property, the documents of the pol house would need to be approved by the heritage department as well as the TDO department.⁴⁴ This requirement of getting documents approved and signed already takes twice the time it would take to use TDR from other parts of the city. Moreover, the meetings for approving TDR in the heritage department are held once a month. If the owner does not submit all the documents and paperwork correctly, he would have to return the next month and

⁴³ The TDR policy is available to everyone in the city. There are TDR policies for slum rehabilitation, heritage properties, and so on. https://ahmedabadcity.gov.in/portal/jsp/Static_pages/corp_department.jsp.

⁴⁴ "Town Development Department." Departments :: Ahmedabad Municipal Corporation. Accessed April 04, 2018. https://ahmedabadcity.gov.in/portal/jsp/Static_pages/corp_department.jsp.

repeat the process till he gets the approval. According to the commissioner, the TDR application usually takes eight to ten months to get approved. In today's generation of online transactions and quick pays, people do not have the patience to go back and forth for the meetings every month for the amount of money that would not be enough to cover the cost of restoration at the end.

5.2.4 Infrastructure and Services

The Walled City was not designed for the population that occupies it now. Hence, it is not equipped to accommodate the different infrastructure and services. The city was designed when there were no vehicles available to the people. Today, every household has at least one two-wheeler. As cars are becoming more common and affordable, people are easily able to buy it. However, the Walled City does not have the space to accommodate car parking. As the streets go deeper into the pols, they become too narrow for a car to pass through. People are eligible to buy cars, but they do not have the facilities to park them. A family of four can be seen traveling in one two-wheeler because their urban fabric does not allow them to get a car. This is extremely unfair to the people living in the pols. This is causing them to leave the Walled City for better infrastructure and services. Moreover, with the increasing population and the relative increase in people setting up offices in the Walled City, the traffic congestion has increased exponentially in the narrow streets of the city. This has severely contributed to the air pollution and noise pollution in the city, and this is adversely affecting the historic fabric of the pol houses and the monuments in the city.

Currently, many pol houses are not equipped to handle air-conditioners, and with the weather in Ahmedabad, this adds on to the discomforts in the lives of people. Up until about 20 years ago, the pol houses did not have toilets inside the house. . It is in the recent years that people have installed toilets at the entrance of their house for comfort and because the newly married women coming into the family living in the pol house was not comfortable using the public toilets. The Walled city, therefore, wasn't designed to accommodate plumbing lines throughout the city. As a result, the pol houses do not have running water for 24 hours. They get running water for 2 hours in the morning during which people fill up their vessels and water tanks to use throughout the day. As opposed to that, a majority of the houses in the new city have 24 hours running water facility. This lack of running water significantly adds to the discomforts in the lives of the people and negatively affects their perception towards the value of the heritage property.

5.2.5 Environmental Effects

Ahmedabad experiences three main seasons - Summer (March to June), Monsoon (July - September) and Winter (November to February). The summer season has hot and dry climate with an average temperature range from 80 degrees Fahrenheit to 117 degrees Fahrenheit. The south-west monsoon winds bring humid climate to Ahmedabad from mid-June to mid-September. The average temperature in monsoon ranges from 90 F to 75 F, and the average

rainfall is 93cm. The winter season is cold and dry with the temperature ranging from 80 F to mid 50s F.⁴⁵ It can be said that each season affects the pols differently because of its diverse climate.

The pols have been designed well to protect the people from the high temperatures of summer. Because of the wider facade being shared, and the narrow facade being exposed, relatively less heat enters into the house. Moreover, the streets along the pol houses are usually shaded by the pol houses throughout the day. Not much damage to the materials is seen during this season.

Monsoons are particularly damaging to the pol houses. Because of the heavy rains, most of the owners usually cover their courtyards with tarps, making the house resemble a tent. The terrace and the ceilings are made of wood. Because of the regular rains for three to four months, the wood is continually exposed to water without giving it a chance to completely dry. This causes the wood to rot, and the ceilings to leak. The people living in the pol house usually put up vessels to collect the dripping water from the ceilings. The rains even affect the plaster on the interior walls. Though the plaster is not a historic feature, the deteriorated plaster in the interior ruins the aesthetic of the house. The re-application of plaster is also expensive. Moreover, the climate during the monsoon season is humid. With the courtyards covered, and the entrance plinth inaccessible for the protection from rains, and with the openings closed to prevent the rain from entering the house, the houses have no cross ventilation. The rain also brings in insects and increases the rate of diseases in addition to flooding and uncleanness on the streets of the pols. It can be said that the monsoon season is the harshest on the people as well as the urban fabric.

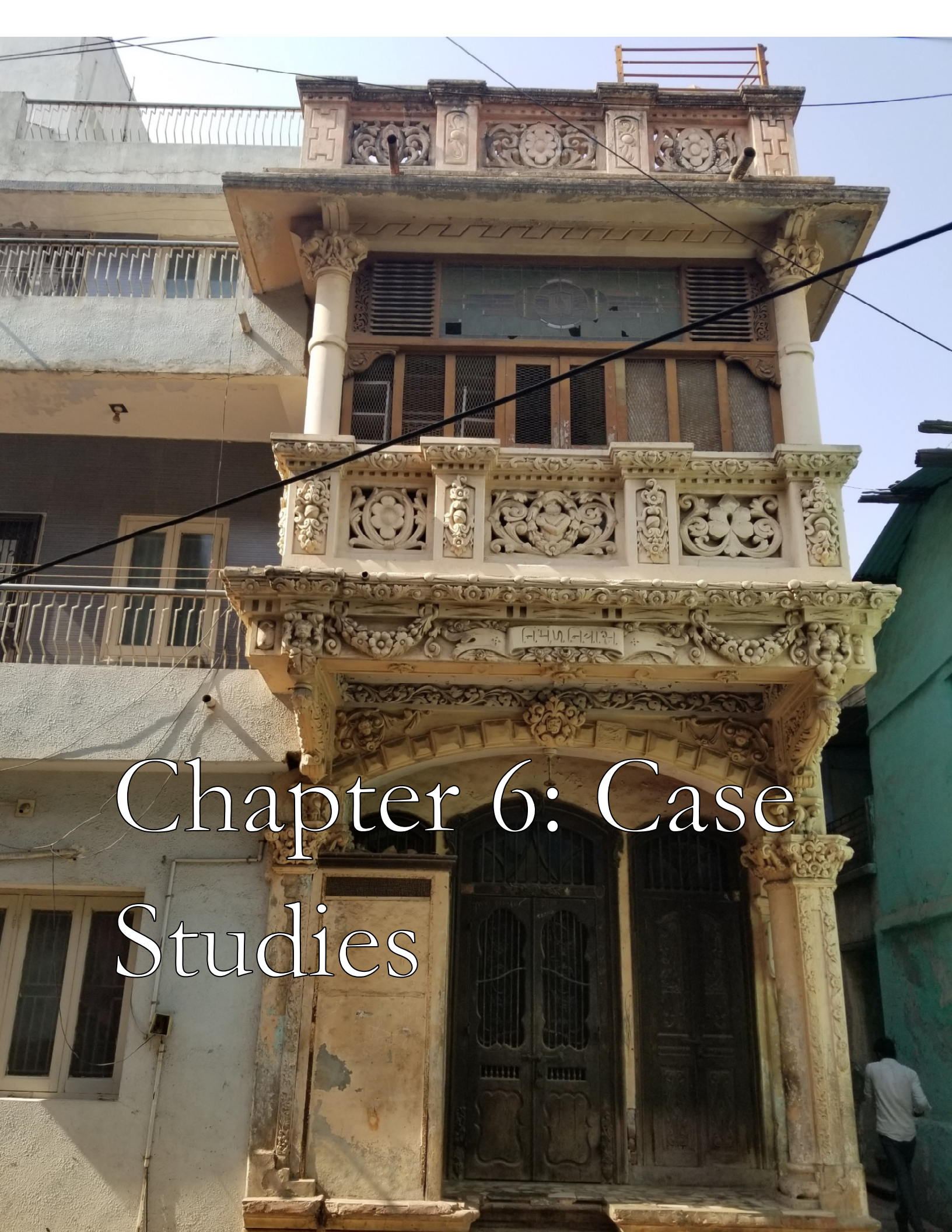
⁴⁵ "Average Weather in Ahmedabad, India, Year Round - Weather Spark." Accessed April 04, 2018. <https://weatherspark.com/y/107349/Average-Weather-in-Ahmedabad-India-Year-Round>.

During the winter season, the people take down the tarps, and the cross ventilation in the house begins again. The houses do not have a heating system, so the temperature in mid 50 F feels cold. The wooden structure system and the thick walls help in keeping the house relatively warm. The courtyard plays a vital role in heating up the interior of the pol house during the mid-day.

To conclude, it can be said that the monsoon season is a challenge.⁴⁶

To sum it all up, without addressing these five factors, the conservation and regular maintenance of the pol houses is not possible. These factors are not unique to just the Walled City of Ahmedabad. There are other towns and cities that have been plagued by similar issues severely affecting their heritage. Some have successfully addressed these issues and protected their heritage. A lot can be learned from their actions to understand if similar steps could make positive contribution in the situation of the pol houses in the Walled City of Ahmedabad.

⁴⁶ Ubbelohde, Susan, and George Loisos. "The Ahmedabad Pol House : Courtyard Strategies in a Hot-Dry/HOT-Humid Climate."

The image shows a two-story building facade with a prominent balcony. The balcony has a decorative railing with carved floral and geometric patterns. Above the balcony is a large window with a central circular motif. The building is surrounded by other structures, including a white building to the left and a green building to the right. A person is visible in the bottom right corner. The text "Chapter 6: Case Studies" is overlaid on the image in a white serif font.

Chapter 6: Case Studies

Conservation of a heritage monument or a heritage city is not a single entity's responsibility. A large group of stakeholders is responsible for the outcome of the conservation of a project. It is the decisions made by the different stakeholders that cause the success or failure of a project. The pol houses are in the deteriorated state because of several factors. Different towns have faced similar challenges and have been successful in achieving a balance between the stakeholders and gaining a positive outcome in their conservation project. The different cases are studied to understand how the role of stakeholders plays in a conservation project, and how the city could gain maximum benefit when all the stakeholders work together towards a common goal. These cases will be compared to the case of the Walled City of Ahmedabad, which is facing similar problems.

Some of the common factors that were considered for the case studies are:

- Living Heritage Site – A historic old city where people carry on their day-to-day lives;
- Deteriorating houses because of people moving out for better facilities and other socio-cultural and economic aspects;
- Involvement of stakeholders in their proposals and policies;
- Innovative action towards the integration of stakeholders;

The three case studies that are studied are:-

1. Historic Centre (Old Town) of Tallinn, Estonia
2. Hoi, an ancient town in Vietnam
3. Old City of Yangzhou, China

Each case study begins with the problems faced by the city and its heritage. It is followed by their conservation approach and analysis on how the case-study is similar and different from the Walled City of Ahmedabad. It also analyzes if their conservation approach can be applied to the case of the Walled City of Ahmedabad.

6.1 Historic Centre (Old Town) of Tallinn, Estonia



Figure 29. Old town of Tallinn, Estonia

Tallinn is the capital and the largest city of Estonia.⁴⁷

“The origins of Tallinn date back to the 13th century when a castle was built there by the crusading knights of the Teutonic Order. It developed as a major center of the Hanseatic League and its wealth is demonstrated by the opulence of the public buildings (the churches in particular) and the domestic architecture of the merchants' houses, which have survived to a remarkable degree despite the ravages of fire and war in the intervening centuries.”⁴⁸



Figure 30. Streets of Old Town of Tallinn

The Historic Centre (Old Town) of Tallinn was inscribed on the World Heritage list in 1997. The inscribed area covers the Old Town situated within the medieval walls and some of the bastions and entrenchments from the 16th century.⁴⁹

⁴⁷ Tallinn Tourism | Tallinn Travel Guide & Tips: Triphobo, <https://www.triphobo.com/places/tallinn-estonia> (accessed April 04, 2018).

⁴⁸ Centre, UNESCO World Heritage. "Historic Centre (Old Town) of Tallinn." Documents - UNESCO World Heritage Centre. Accessed April 04, 2018. <https://whc.unesco.org/en/list/822/documents/>.

⁴⁹ Ibid.

The other historic structures from the 19th century, such as bastions, re-building of the fortifications and the historic urban centers are in the buffer zone.⁵⁰



Figure 31. Location of Tallinn

This case study focuses on the rich history of Tallinn Old Town and its protection and presents some good examples of community involvement in safeguarding the site's outstanding value and shaping a living environment that is enjoyable for all. Tallinn confronts the tensions between heritage conservation needs and the aspirations of the local communities that co-exist. *"Only when the Old Town has meaning and value to local people, will it be a source of information*

⁵⁰ Ibid.

and inspiration to visitors.” It talks about the constant engagement needed for the beneficial co-operation of authorities and communities. A breakthrough towards the sustainable development of Estonian heritage started when the heritage authorities made a severe about-turn in their attitude towards publicity, themselves contributing to the voluntary work promoting heritage, explaining and teaching.⁵¹

Tallinn World heritage site is the heart of the capital of Estonia. Tallinn is a significant meeting and interchange point of different cultures – religions, lifestyles, building traditions and nationalities. Estonia is a multinational and multicultural society.⁵² The Old Town of Tallinn is similar to the Walled City of Ahmedabad in the sense that both of them are inscribed on the World Heritage list and are living town of multicultural societies. Like the Walled City of Ahmedabad, Tallinn was faced with the market economy when the people cared more for the modernizing society, were more involved with personal careers and new challenges, and hence the historic environment and community values had dropped into the background.⁵³ However, Tallinn was successful in getting the society stabilized and back to caring within a decade and is now a successful example of beneficial cooperation between the authorities and communities. One of the significant difference between the Old city of Tallinn and the Walled City of Ahmedabad is the scale and population of the cities. While Tallinn has a population of 4000 people, the Walled city of Ahmedabad has a population of about 400,000 people. It is important to acknowledge this massive difference and understand that any measures taken in the direction

⁵¹ Galla. *World Heritage: Benefits Beyond Borders*. Cambridge University Press, 2012.

⁵² Ibid

⁵³ Ibid

of community engagement and integration between the community and government officials in Tallinn, would be far more challenging to implement in the case of Ahmedabad. Although, this case study does provide a successful example in dealing with 4000 people, and there are many opportunities in the Walled City of Ahmedabad to experiment with a similar group as a pilot project.

Riin Alatalu, the author of the article on “Responsible local communities in historic inner city areas: Historic Centre of Tallinn, Estonia,” defines stakeholder community as a group of interacting people living in a shared location and having some shared values. In Tallinn, there are several different communities – local societies, non-governmental organization, cultural and educational centre and the city authorities. In Tallinn, it is believed that the World Heritage conservation is, first of all, a responsibility of the local community.⁵⁴

When the heritage policies in the city faced the crisis under the increasing influence of modernization and people getting more focused on their careers, the city regained control through support and social control of the community. “Heritage is about people. The cultural value of any World Heritage site will only be maintained if citizens are ready, able and willing to inherit it and if they consider this inheritance to be of value.”⁵⁵ It is important to note that the people in this city valued their heritage and felt immense pride and responsibility towards it. Some of the essential takeaways in the form of steps taken by the city and the community are:

⁵⁴ Ibid

⁵⁵ Ibid

- Local societies were formed to participate in the preservation of values of the living environment. People gathered to know each other, take care of surroundings, organized meetings with the representatives of the city government, informed the authorities of any abandoned houses and even kept an eye and intervened on the planning policies.⁵⁶

- The importance is given to Educating people about the Heritage – Collegium Educationis Revaliae (CER) is a school in Tallinn started by the parents. The school aimed to be an innovative, cultural and social center that functioned as a community space. Every member of community – children, parents, grandparents, teachers and friends participated actively in educational and cultural life.⁵⁷ Such institutions in a heritage building are successful and cared for by people because the buildings care for them in return. It is a mutual beneficiary function where the object (heritage building) becomes a tool to provide for the community. This, in turn, makes the community care for the building in return because it forms an integral part of their lives and becomes a valuable asset to them.

- Fund-raising activities – Traditional charity fairs twice a year, celebrating Heritage Month, European Heritage days Middle Age days, etc.

⁵⁶ Ibid

⁵⁷ Ibid

These steps in the direction of valorizing the heritage can be a significant contribution in the case of the Walled City of Ahmedabad. There is a need to think about how the Pol houses can become an actor in benefitting the community.

6.2 Hoi An Ancient town, Vietnam



Figure 32. Location of Hoi Ancient town, Vietnam



Figure 33. Hoi An town

Hoi An Town is located in the Quang Nam Province in the Socialist Republic of Vietnam. Hoi An is a traditional market port in South East Asia. Most of the buildings settled along narrow traditional roads in the town have traditional architectural style between 18th to 20th century.⁵⁸ It has more than 1390 architectural remains representing ten architectural forms – residential house, place of worship, village communal houses, pagoda, temples, tombs, bridges, water wells, markets, and assembly halls. The residents of Hoi An have been living and working in the same houses through many generations.⁵⁹

“Vietnam is one of the few developing countries with impressive achievements in poverty reduction. Diversification

⁵⁸ "The Documentation to UNESCO for Inscription on World Cultural Heritage List, Hoi An Ancient Town." WHC Nomination Documentation. <https://whc.unesco.org/uploads/nominations/948.pdf>.

⁵⁹ Galla. *World Heritage: Benefits Beyond Borders*. Cambridge University Press, 2012.

of the resource base for local communities, active infrastructure development and expanding choices for the poor have been critical in the Doi Moi economic reform and poverty eradication program.”⁶⁰



Figure 34. Street view of Hoi An Ancient town

Some of the similarities between Hoi An and the Walled City of Ahmedabad are:

- Inscribed as a World Heritage City
- Lived-in heritage
- Different types of architectural forms
- Local traditional arts and crafts were not given much importance
- A large group of people living below the poverty line

⁶⁰ Hoi An Or The Ancient Amaravathi In Vietnam, <http://www.newindianexpress.com/opinions/2018/feb/17/hoi-an-or-the-ancient-amara> (accessed April 04, 2018).

This case study is especially important because Vietnam has been successful in alleviating the poverty in Hoi An town with the help of stakeholders' engagement. This case study describes how the government drafted their action plan for poverty alleviation – their key challenges, their action plan, their goals, their priorities. The most interesting part of this study is the different government strategies in building a sense of ownership among local communities through projects that demonstrate direct community benefits.

The local authorities had identified four key challenges to safeguard the outstanding universal value in a five-year plan drafted in 2002⁶¹:

- Conserving the authenticity and integrity of the Ancient Town;
- Meeting the needs of the present residents who live in the heritage buildings;
- Promoting and safeguarding the outstanding universal value in tourism development;
- Improving the income and standard of living of the people without compromising the site's values;

They proposed a ten-point sustainable Action Plan that was adopted by the Hoi An District and Quang Nam Governments, some of the most relevant to the Walled City of Ahmedabad are⁶²:

- Addressing the organic historical linkages and relationships between Hoi An Ancient town and the surrounding stakeholder communities and villages as a priority;

⁶¹ Galla, Amareswar. "Hoi An or the Ancient Amaravathi in Vietnam." The New Indian Express. February 17, 2018. Accessed April 04, 2018. <http://www.newindianexpress.com/opinions/2018/feb/17/hoi-an-or-the-ancient-amaravathi-in-vietnam-1774771.html>.

⁶² Galla. *World Heritage: Benefits Beyond Borders*. Cambridge University Press, 2012.

- Implementing affirmative action programs to ensure the participation of disadvantaged women and young people from surrounding villages;
- Investing more resources from tourism revenue to assist with further restoration of monuments and heritage houses and urban infrastructure;
- Integrated local area planning, both short term and long term, by the local government to continue to enhance the urban infrastructure to cope with development pressures;

All the ten principles were embedded into the budgetary process of the governments concerned. The Home Owners Association, Women's Union and Youth Union provided the civil society participation in drafting the Action Plan.⁶³

The most important takeaways from this case study are the different methods to enable stakeholder benefits that the city adopted to alleviate the poverty using the heritage properties of the city. Some of them are⁶⁴:

- In the first decade after the World Heritage inscription, approx. 200 government-owned and 1125 privately owned heritage buildings were repaired. Because of the high restoration cost compared to the income of the owners, the municipal government provided a partial subsidy for several private projects. The municipal government provided three-year loans without interest. In some cases, the government purchased the

⁶³ Galla. *World Heritage: Benefits Beyond Borders*. Cambridge University Press, 2012.

⁶⁴ Ibid

privately-owned properties from the families who have economic difficulties and wanted to sell their houses. The government restored those houses and the previous owners could live in the same place at a reasonable rent. This prevented outside interests from purchasing the properties and enabled the residents to remain in their homes.

- Because of wars and famine in the last century, and the introduction of plastic and other mass-produced goods, centuries-old traditional craft villages were disappearing. The revitalization of these villages, the use of their skills in the conservation and restoration projects of the Ancient Town, and initiatives to alleviate poverty around the World Heritage site was prioritized. These actions brought in employment and regular income to the people in these villages as well as increased the research and value of these traditional crafts. Some of the villages that benefitted from these initiatives are:
 - Thanh Ha – A Ceramic Village
 - Kim Boong - Woodcraft Village
 - Tra Que – Horticultural Village
 - Vong Nhi – Fishing Village
- Improving the infrastructure that included underground systems of electricity, telephone, cable TV, water supply, fire control, roads and sidewalks.
- Repairing the Hoi An Market helped the local communities and suppliers from other villages to continue using the two centuries old historic space.

“In order to effectively manage, conserve and promote a heritage site, it is essential to have comprehensive and long-term strategies based on conservation principles and community interests and benefits through strategic stakeholder cooperation, including governments, scientists and researchers, the heritage house owners, business operators and other local people.”

One example that shows this is Nguyen Thai Hoc Street, Lijiang Ancient Town in China. In 2000, the visitor services in two streets, Tran Phu and Le Loi, was relatively higher than any other streets in the town. This led to a significant gap in the income between the homeowners in those two streets and the remaining streets. A revitalization program focusing on the development of tourism services along Nguyen Thai Hoc Street was initiated to bridge this gap. The government mobilized funds to restore 26 properties. Homeowners in the street were granted a license for businesses such as tailoring shops, art galleries and souvenir shops, which were previously restricted to Tran Phu and Le Loi streets. Improved equality in income distribution between homeowners provided the property owners with incentives and resources to maintain their heritage buildings.⁶⁵

These different approaches are instrumental in developing scenarios on what could be helpful for the Walled City of Ahmedabad. One of the common factor that could be observed in the conservation practices in developing countries is that the communities in the developing countries would not take a stand if there is no direct financial benefit. There is a need to come up with solutions which could serve the community economically. Even when serving the cultural

⁶⁵ UNESCO. Regional Advisor for Culture in Asia and the Pacific. "LEAP: Integrated Community Development and Cultural Heritage Site Preservation in Asia and the Pacific Through Local Effort." 1999.

heritage of the community is considered, the cultural traditions are not practiced until the community is given a solution or an initiative to monetize on them. The Ancient town of Hou found solutions to monetize on many social and cultural heritage for the benefits of community and succeeded.

This case study helps us understand the delicate balance between the different stakeholders. The community would not have benefitted without the government officials and other civic officials devising an Action Plan. The Action Plan could not have been a success without the different businesses and investors investing in the direct and indirect funding for the conservation and restoration of the heritage properties. Moreover, it was the trust between the different stakeholders and the community that incentivized the communities to adopt the different policies and subsidies that the government provided and use them for their benefit – economical and historical.

6.3 Old City of Yangzhou, China



Figure 35. Location of Yangzhou, China

Yangzhou, a city in Jiangsu province, is located on the lower reaches of the Yangtze River and the Huaihe River. The history of the city dates back to 486 BC. It was a major ancient economic and cultural center in eastern China. The Old city has many historical sites including the 1,500-years-old Daming Temple; the Fajin Temple built partly to

commemorate the monk, Jianzhen, and ruins of temporary palaces used by several emperors for some 3,000 years.⁶⁶



Figure 36. Historic houses of the old city of Yangzhou

Today, the city's heritage continues to thrive in the narrow, cobbled stone lanes sprawling outward from the center of the old town historic area. These lanes intersect each other to form overlapping patterns which contribute connect the historic houses.⁶⁷ A vast portion of this historic area with the historic houses is characterized by one to two-story courtyard houses, occupying a population of about 110,000 residents.⁶⁸

⁶⁶ Yangzhou, City Information of Yangzhou, Jiangsu Province. Accessed April 04, 2018. <http://www.chinatoday.com/city/yangzhou.htm>.

⁶⁷ Ibid.

⁶⁸ Galla. *World Heritage: Benefits Beyond Borders*. Cambridge University Press, 2012.

As in other Chinese cities, the area was deteriorating and threatened by rapid economic development and urbanization. There was high risk from the unfortunate customary redevelopment model of demolition and relocation. Because of the deteriorated housing, poor municipal infrastructure and lack of proper sanitary facilities, many of the higher-income and younger generation were moving to new city areas lured by the modern living standards. The Walled City of Ahmedabad faces similar challenges, with its traditional neighborhood, pols, getting affected by the economic development and urbanization. Like the traditional neighborhood of Yangzhou, the Walled City of Ahmedabad is also facing migration of higher-income and the younger generation to move to new cities because of the deteriorating properties, lack of services and poor infrastructure.

The Yangzhou Municipal Government, GTZ (German Technical Cooperation) and Cities Alliance collaborated to introduce a sustainable urban conservation concept which linked heritage preservation to the improvement of living conditions of residents, by upgrading the historic neighborhoods and supporting self-help initiatives. A long-term strategy following a participatory and process-oriented approach had been developed and tested. In a pilot block, residents were involved in Community Action Planning (CAP), resulting in agreement on appropriate housing standards and self-help modernization of houses and facades. Living conditions were remarkably improved through this mobilization of the community. Based on the

successful experience, it is now being adopted for use throughout the old city in Yangzhou and viewed as a potential model for use throughout China.⁶⁹

The program elaborated a comprehensive upgrading strategy for the whole inner city of Yangzhou, which focused not only on the preservation of listed historic buildings, but also on the residents, particularly the lower-income groups, in improving their living conditions, and modernization of their houses. In 2006, a pilot neighborhood was identified by the iYET (international Yangzhou Experts Team) which covered an area of 1.4 hectares including 147 households. The pilot neighborhood was representative of the problems that were typical of traditional neighborhoods in the Old City.⁷⁰

The conservation approach was involving the residents in the improvement of the area as opposed to the demolition of the traditional structures. The opportunity for Yangzhou was to link the upgrading of houses with historical rehabilitation and develop a model for conservation applicable throughout China. In this approach, a parallel focus was placed on families and history, with neither being dominant. 'Community Action Planning' (CAP) was introduced to improve the awareness of residents and encourage the active involvement of the communities. By the active participation of the community, the CAP methodology brought in the community as a development partner with the city.⁷¹ It should be noted that the motivation of the CAP project

⁶⁹ Zhu, Dr Ing Lonbin, and Dr Ing Reinhard Goethert. "Historic Neighbourhood Upgrading with Community Participation ." <http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/pdfs/CHINA-HERITAGE.pdf>.

⁷⁰ Zhu, Dr Ing Lonbin, and Dr Ing Reinhard Goethert. "Historic Neighbourhood Upgrading with Community Participation ." <http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/pdfs/CHINA-HERITAGE.pdf>.

⁷¹ Ibid

in involving the residents was not to put all the responsibilities for the conservation on the residents, but including them as one of the crucial stakeholders who have the power to initiate change in the houses.

CAP included an initial workshop, organized by iYET and YFCC (Yangzhou Famous City Company), focused on testing Community Action Planning and developing strategies and a development timeline for the pilot block. Established by GTZ experts and representatives from local authorities, iYET was composed of both local and foreign professionals. A unique government institution 'Old City Office' (OCO) was established as a primary partner representing the city and was the critical counterpart of the iYET team. The implementing partner was the YFCC, a technical organization. Several other city agencies also participated in a supporting role: mainly the Cultural Bureau, Planning Bureau, Construction Bureau, House Management Bureau, and Environmental Protection Bureau.

A three-level framework was developed to structure the issues to be explored with the community – Lane/street, Façade and House. The framework was focused on identifying the elements in the neighborhood that were considered historically significant by the residents and providing solutions in partnership with the government to facilitate their conservation. It also included identifying the roles and responsibilities of the different stakeholders for the conservation of the different sections:

- Lane/Street: Maintenance and improvement of the streets were considered the responsibility of the city. Quick and low maintenance interventions were to be proposed for improving the conditions of the streets to reinforce the street community.
- “Façade: Responsibility of multiple actors in the conservation. The strategy explored was to involve the homeowner by offering a cost-sharing arrangement. A 30/70% split in costs was tested and exceeded expectations.
- “House”: It relates to an improvement of the interior of the house. A strategy of improving one house per lane initially served as a model for residents to follow, while also providing educational opportunities, for example, skill training and a focus on training visits.



Figure 37. Poster of the 4 day workshop with the community

The implementation of the CAP included⁷²:

- A 4-day workshop with the community to identify the historic elements valuable to the community, the capacity of the owners to fund the restoration of their house, devising a matrix that provided a template for upgrading standards of the identified historic elements, which also determined associated costs.



Figure 38. Stakeholder meeting

⁷² Ibid

- The long-term benefit was that the community would have models to follow as their income circumstances changed and their desire and capacity to renovate further their houses increased.










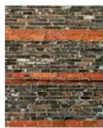



















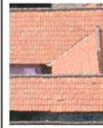












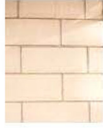








2 Yangzhou Old City, Phased Upgrading Decision Matrix (PUD Matrix)										
	Wall material	Door	Window	Awning	Air conditioner	Roof	Solar Heater	Rain pipe	Electricity	
Target							no Solar Heater			
				no awning	no AC		Flat-plate solar water heaters			
Transition										
										
Inappropriate										
										

Figure 39. Design models for the owners to follow as their income circumstances change

The “Community Action Planning” approach succeeded in achieving the following⁷³:

- Residents were very active in expressing their opinions and provided a direct reference for community improvement
- Communities became more aware of the issues of planning and implementation and recognized the different improvement issues of the lane, facade and house;

⁷³ Historic Neighbourhood Upgrading With Community Participation, <http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/pdfs/CHINA-HERITA> (accessed April 05, 2018).

- A common understanding was achieved among the various actors;
- Residents were able to make better-informed decisions in choosing among alternatives and structuring ideas;
- Residents prepared an action plan to organize short and medium-term improvements in their housing environment, to help organize their scarce resources for maximum benefit;

The pilot project was further presented to the municipal government, who accepted the outcomes of the workshop and made further changes in the master plan of the pilot project according to the suggestions by the residents. In the months following the CAP workshop, 40 houses had been renovated. The renovated interior in the traditional houses provided better kitchen and toilet services. The public spaces were improved and the exterior of the traditional facades was renovated.



Figure 40. Renovated Courtyard



Figure 41. Renovated toilet and kitchen



Figure 42. Renovated facade of the historic houses

The major takeaways from this case study are:

- There is a need for interventions in the traditional houses to include modern sanitary and kitchen facilities. Without those, the old cities of many developing countries are facing migration and abandonment of the traditional houses outwards.
- It is of utmost importance that the owners of the traditional houses are included in determining the historic significance of their houses, for they are the ones who have the authority to implement and adapt the different policies available to them. Including the

community in identifying the issues in the neighborhood makes them more aware of the problems and helps them develop trust with the other stakeholders.

- The involvement of the different stakeholder for a common project helps them identify their roles and responsibilities towards the project. This clarity of the responsibilities is of utmost importance for the execution of a project.

This case study and the case of the Walled City of Ahmedabad are similar regarding the social and economic problems faced by the city. Even though the Old city of Yangzhou covers almost the same area as the Walled City of Ahmedabad, the population in Ahmedabad is four times the population of the Old city of Yangzhou. Still, the possibility of a similar CAP approach could be tried in a pilot neighborhood of the Walled City of Ahmedabad. One of the other major difference is the number of agencies involved in contributing to the heritage rehabilitation of the traditional houses. It seems that the city of Yangzhou has a system where different agencies such as Cultural Bureau, Planning Bureau, Construction Bureau, House Management Bureau and Environmental Protection Bureau, valued the importance of heritage as a potential tool to improve the socio-economic condition of the Old City. The city of Yangzhou seemed to understand that each agency holds equal power to make a difference, and only with a balanced integration of the different roles and responsibilities can positive outcomes be achieved. As opposed to this, the Walled City of Ahmedabad has fewer agencies working towards the conservation of the pol houses. There is a significant lack of inter-disciplinary approach in addressing the problems of the city.

To conclude, these three case-studies explain how the successful coordination between different stakeholders can contribute to positive outcomes for the heritage as well as the community. There is a need to explore the traditional skills of the community that have the potential to be monetized. The above case-studies provide a stepping stone in exploring the different scenario that could be adopted by the Walled City of Ahmedabad.



Chapter 7: Proposal

The aim of the proposal is to address the issues of the conservation of the pol houses on a larger scale. Today, in the Walled City, people do not want to get involved in initiatives where they do not benefit financially. Moreover, because of the lack of trust between the government and the people, they don't feel inclined to contribute in public causes. People in the pols love their lifestyle, their community and are proud to live in the pols. One of the most important reasons of their lack of involvement in the conservation of the pol houses is that they don't know if they can contribute in this field or if their contribution matters at all. To make the people want to get involved in the conservation, they need to be showed that they are valued, and that their involvement matters. Initiatives need to be taken to first make them feel valued and needed. Therefore, it is important to propose the policies addressing the issues that are important to people. Considering and including their opinions while formulating the policies indicates that people's voices matter. Doing this makes people feel valued and in turn, makes them feel an ownership towards their heritage.

The policies proposed in the thesis are a way to inspire all the stakeholders to take charge and be more collectively involved in the process of conservation and maintenance of the pol houses. The process of scenario development was adopted to propose recommendations for the factors affecting the pol houses and the roles of the stakeholders in dealing with the issues within those factors. In scenario development, all the possible scenarios on what can be done by the different stakeholders in addressing the factors are listed down. Based on that, a vision is formed for the Walled City and the pol houses, and policies are proposed to achieve that vision.

The policies are drafted to address everything that needs to be done in the Walled City to promote better conservation practices. It has to be noted that implementing the actions mentioned in these policies simultaneously is challenging. These policies are a checklist, that once completed, would be a successful model for the conservation and maintenance practices in the Walled City. Strategies would need to be developed to integrate certain actions from each policy, which would motivate people of the pols to initiate conserving the pol houses and be active members among the other stakeholders. The strategies should be devised such that equal voice is given to all the stakeholders and steps are taken to achieve a shared vision.

The approach to the proposal includes:

- Scenario Development
- Creating a vision for the pols and the pol houses in the Walled City of Ahmedabad
- Four policies are proposed to address the factors affecting the conservation of pol houses. Each policy has its main objective, immediate action required and the actions that are needed for long-term. Each action is in the order of its priority. There are instances where the same action is provided for multiple policies if the action contributes to achieving the main objective of those policies.
- Proposing an intermediary public-private agency for effective execution of some actions in the policies
- An example of how a strategy can be formed using the actions in the policies is given. The aim of the strategy is to make the people of the Walled City feel ownership towards the pols and the pol houses and make them *want* to conserve the pol houses. The strategy is

divided into different goals to be achieved in a certain period. The strategy also expands on which stakeholder will carry out what responsibilities.

Scope of Proposal

In a country like India, the legal framework in place allows for public participation. The government has encouraged that the people think, decide and act in their own socio-economic interest as per the basic concept of panchayati raj.

“The self-government of villages in India by locally elected representatives or panchayati raj (panch – five member committee; raj – governance) was strengthened by the 73rd constitutional Amendment Acts of 1992. The basic concept of panchayati raj is that the villagers should think, decide and act in their own socio-economic interests (NIRD, 2005). Considering that the village-level self-governance institutions already exist, the next logical step would be to dovetail environmental decision- making into their scope of governance.”⁷⁴

“Currently, from the concerned districts three members are nominated to the public hearing panel without any clear-cut definition of their role or the weight of their opinion on the final minutes of the public hearing. The panchayats could be given the key role right from the pre-EIA consultation stage through to regular monitoring of the project for adherence to conservation and mitigation measures promised by the proponent (page 124 from the need for participatory principles article).”⁷⁵

⁷⁴ T. Rajaram & Ashutosh Das (2006) Need for participatory and sustainable principles in India's EIA system: lessons from the Sethusamudram Ship Channel Project, Impact Assessment and Project Appraisal, 24:2, 115-126, DOI: 10.3152/147154606781765237

⁷⁵ Ibid

This indicates that there are no legal or political implications for a community to come together and work towards a certain vision under the governance of a local committee, panchayati raj for villages. In fact, the government motivates the people to invest and get active themselves in improving their socio-economic conditions through various policies.

“..better coordination and consolidation of efforts by different stakeholders could be achieved by supporting the Heritage Department at the AMC as the nodal agency, with particular attention to privately-owned properties and traditionally-maintained houses and public buildings and spaces.”.⁷⁶

“ICOMOS recommends to extend the management plan and its implementation mechanisms to engage in an informed and proactive way the local communities and religious groups that are responsible for heritage resources.”⁷⁷

- ICOMOS, Management Plan

Today, public open spaces and public facilities are owned by the Ahmadabad Municipal Corporation, other institutions are owned by community trusts, temple trusts for Hindu and Jain structures, and by *Waqf* for Islamic structures. Listed historic buildings are owned by the ASI (central government) or the State Department of Archaeology (State government). The majority of properties within the nominated property are privately owned.⁷⁸ Because of the complexity in the ownership of heritage properties, a co-management public-private management framework proposed below could be one of the few legally viable alternatives for

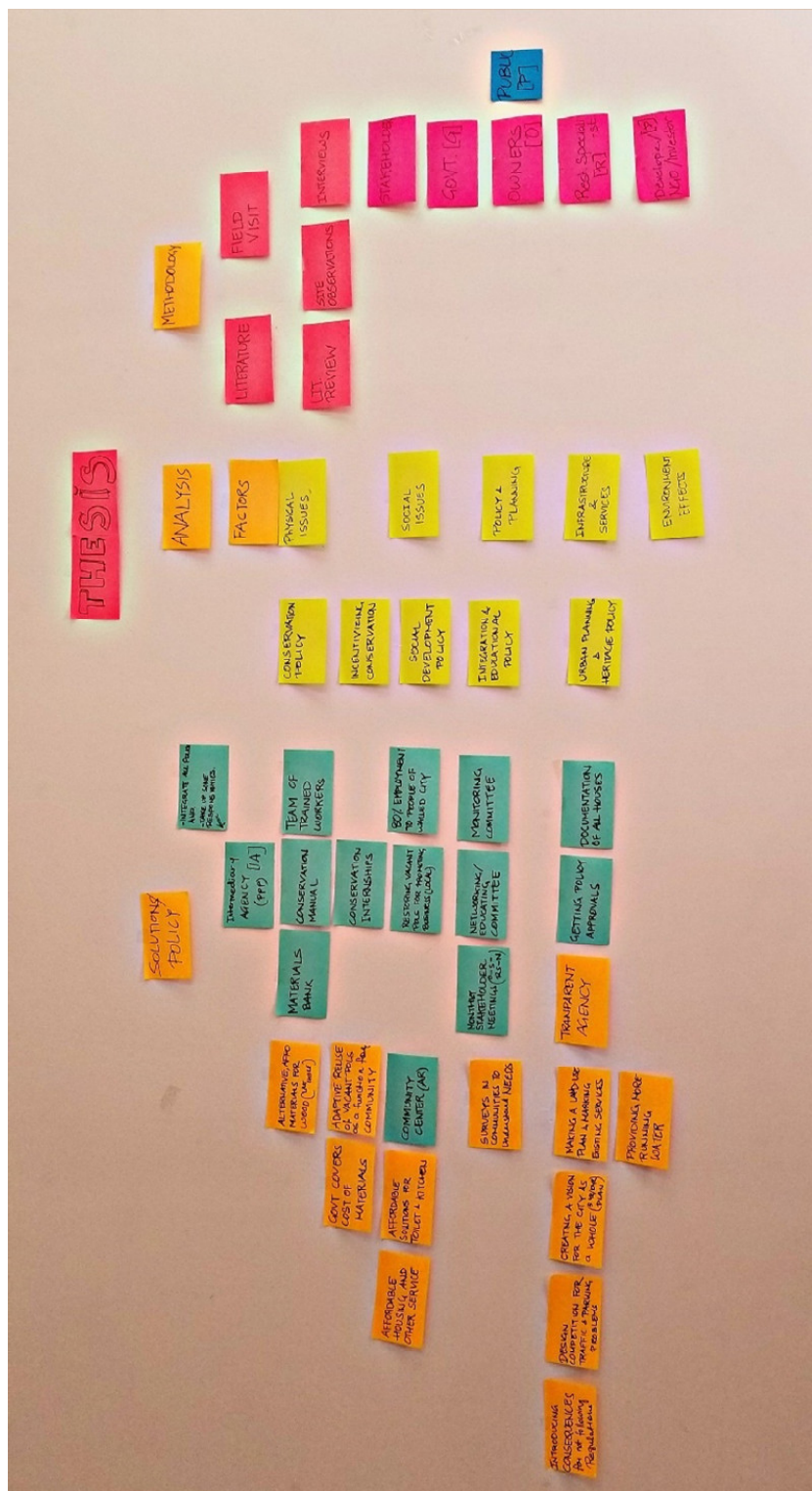
⁷⁶ UNESCO, Historic City of Ahmadabad, Management Plan

⁷⁷ Ibid

⁷⁸ Ibid

the active actions for the conservation and maintenance of the pol houses and other heritage properties.

People living in the pols don't realize that they are one of the most important stakeholders in protecting the heritage of the city. Since the pol houses are privately owned heritage properties, their conservation rests in the hands of their owners. That doesn't mean that people understand how to make the decisions that would benefit not only them but also protect the heritage properties. This is where the other stakeholders need to step up. They need to make the people realize how substantial their role is in protecting the heritage of the city and understand the issues that people in the pols are dealing with. Discussing solutions among the stakeholders together would benefit the people and make their life easier by protecting the heritage. When the government starts showing that it cares for the people and gives them evidence on how the conservation of pol houses benefits them, there is no reason why people would not willingly get involved. Only by joint efforts, developing a mutual understanding and taking steps in solving the challenges that people face in preserving the pol houses and other issues related to the pol houses, would a mutual trust among the stakeholders be established. This trust goes a long way in implementation of policies and incentives proposed by the government.



	Conservation	Social Issues and Education	Environmental Effects	Lack of Infrastructure and Services	Integration and Awareness	Policy and Planning	Incentives
Owners/Tenants	<ul style="list-style-type: none"> - Maintenance every 2 years - Forming a team of trained workers - Tenants liable to maintain and conserve the pol house under certain conditions 	<ul style="list-style-type: none"> - Like Panch forming a Conservation and Maintenance team per 8-10 pols depending on its size - Adaptive Reuse of one pol house in every pol into a community center - Incorporating on-site conservation in university syllabus (architecture and civil students) in return of either credits/internship/certificate/p possible opportunity to work for a big firm after graduating 			<ul style="list-style-type: none"> - Forming a team of trained workers for every pol (trained by experts) 		<ul style="list-style-type: none"> - Incorporating on-site conservation in university syllabus (architecture and civil students) in return of either credits/internship/certificate/p possible opportunity to work for a big firm after graduating
Restoration specialists	<ul style="list-style-type: none"> - Consultation provided at minimum rate - Preparing a Standard guide for the conservation of pol houses - alternate and affordable materials, defining the extent to which the pol houses can be changed 	<ul style="list-style-type: none"> - Forming a team of sponsors for promoting conservation internships for students of architecture and civil engineers 	<ul style="list-style-type: none"> - Exploring different materials and treatments to prevent the wooden elements from rotting because of the rain. 		<ul style="list-style-type: none"> - Training a team in every pol to carry out basic maintenance unsupervised and restoration supervised by the restoration specialists 		
City Officials/Govt	<ul style="list-style-type: none"> - A Conservation Manual for Pol owners - A Standard guide for conservation of pol houses - Providing the materials for the conservation and restoration, while the owners provide for labour - A Materials Bank 	<ul style="list-style-type: none"> - Providing affordable design solution for better toilets and kitchen in the pol houses. 		<ul style="list-style-type: none"> - Need for an integrated urban planning model to manage traffic congestion and car parking - Plumbing pipelines in the city that will work for modern toilet and kitchen facilities 	<ul style="list-style-type: none"> - Establishing an intermediary agency for transparency transactions for policies and different incentives between the Govt and owners - Creating media like newspapers - Creating a database of all the owners and the houses through paid internships and temporary job - Utilizing latest technology like phones and emails to notify owners about any latest policies and changes in policies [Aadhar card people]. Sending notice to each owners personally - Sending notice about regulations on the preservation policy. 	<ul style="list-style-type: none"> - Taking a survey of public needs and organizing joint meetings with different stakeholders. - Creating a policy regarding the regulations and incentives associated with preserving the heritage 	
Developers/Investors/PPP/NGO	<ul style="list-style-type: none"> - (Developer) Adaptive Reuse into revenue generating business - (PPP and NGO) Adaptive Reuse into small scale business run by the people of lower income groups 					<ul style="list-style-type: none"> - Law to use the TDR from Heritage properties before those outside the city 	<ul style="list-style-type: none"> - Making policy for heritage more profitable to the developers than that of the new city

Figure 44. Scenario development to reach the vision

7.1 Vision

The Walled city of Ahmedabad continues to function as a living heritage (as a city) with its cultural heritage being a resource and a function in the life of communities, contributing to the social, economic and sustainable development of the city through the integration and involvement of different stakeholders.

This vision can be achieved by addressing the different factors affecting the Walled City.

The policies proposed are:

- Conservation policy
- Social Development policy
- Integration and Education policy
- Urban planning and heritage policy

7.1.1 Conservation Policy

Objective: The pol houses function as an essential resource in the lives of communities leading to their proper conservation and regular maintenance, contributing to a healthy and sustainable lifestyle for the communities.

It can be understood from the analysis of the interviews that the owners of the pol houses with a historic value do not carry out regular maintenance of their houses. This is because they can neither afford extensive conservation and maintenance nor do they have any incentive or motivation provided by the government. Therefore, the Conservation Policy is divided into two parts:

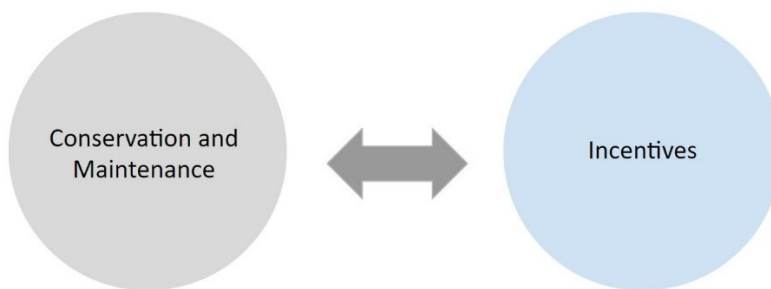


Figure 45. Conservation and Incentives for conservation are interdependent

Part 1 - Materials Conservation

Part 2 - Incentivizing the Conservation

Part 1: Materials Conservation - This part focuses on the material conservation of the pol houses, exploring sustainable and affordable options for repairs and restoration, and establishing standard regulations for the changes that can be allowed to be made to the pol houses

Immediate Actions

- A Standard Guide for the conservation of the pols prepared by the experts
- Devising regulations that define the maximum change that can be made to a pol house
 - Building Height: The height of a pol house or new construction in a pol cannot be higher than the tallest pol house in that particular pol.
 - Exterior Facade: No change in the historic facade of the pol houses except for regular maintenance and repairs under the supervision of a restoration specialist.
 - Setbacks: The historic pol houses must remain where they are. The new construction should not cross the imaginary line aligning the majority of the historic houses along a given street.
 - Interior: Changes in the position of the toilets and kitchen to incorporate modern facilities can be done such that it does not damage the integrity of the interior circulation of the house and does not alter the historic exterior facade of the house. The courtyards in the houses cannot be permanently covered to change the function of the space. The ornamentation and the historic elements in the interior such as courtyards, doors, windows, lintels, balconies, etc should not be altered except for repairs and maintenance. Other permissible modifications include installation of modern facilities like wifi, terrace flooring to prevent leakage, plumbing and electrical facilities.
 - Building Use: Adaptive reuse of a pol house is permissible as far as the alterations, additions, and modifications do not degrade the character of the pol houses, compromise with the integrity of the quality of the space and permanently

damage the historic fabric in the interior or the exterior of the building. The new use of the building should be such that it serves a function in the lives of the community contributing to the social and economic development of the Walled City.

For example,

- a vacant pol house can be converted into a public library,
 - a collaborative workspace for the residents of the pols where they can promote their business;
 - the residents of the pols can use a multifunction space for special occasions like weddings, festivals, etc;
- Any public-private or private ventures in a pol house should provide a certain percent of its profit to the common funds of the pol. This would provide the pol with some funds that can be used for regular maintenance of the pols such as restoration of birdfeeders, cleaning of the streets and for celebrating festivals.

Long-term Actions

- Establishing a materials bank;
- Proper conservation and repairs of the pol house under the consultation of a restoration specialist;
- Regular maintenance of the pol houses;

- Researching and testing alternative and affordable materials to replace wood and lime mortar;

Part 2: Incentivizing the Conservation - This part enlists the actions that would incentivize and motivate the stakeholders to get involved in the conservation and maintenance of the pol houses. The purpose of this policy is to make the communities feel ownership for the invaluable heritage that they are an essential part of and create an environment where heritage brings in different opportunities for the various stakeholders.

Immediate Actions

- Government is covering the cost of materials while the owners cover the cost of labor;
- Forming a team of trained workers equipped to carry out regular maintenance of the pols;

Long-term Actions

- Adaptive reuse of vacant pol houses for the community to start small-scale industries. For instance, the vacant pol houses can be used by the community to promote or expand their existing businesses like printing, food products, etc;

7.1.2 Socio-economic Development Policy - The community feels ownership for the heritage leading them to contribute to the conservation of the pol houses with the support and involvement of the various stakeholders. The heritage brings in economic benefit to the people living in the pols as well as the stakeholders involved in preserving the pols.

Immediate Actions

- Providing affordable design solution for better toilets and kitchen in the pol houses;
- Government converts one vacant pol house in each pol into a community center;

Long-term Actions

- Every public-private venture in the Walled City must have reserved spots for providing employment to the people living there;
- Creating a database that has the documentation all the heritage properties of the Walled city. The database should include the details of ownership, materials, age, previous repairs, policies used by the owners, and the condition of the properties.
- Updates regarding the different policies available to their heritage property can be sent to the owners through the information provided on the database.

7.1.3 Integration and Educational Policy - To promote a better understanding of heritage conservation by bringing the stakeholders associated with the pols together to seek a shared vision of the social, economic and sustainable development of the Walled city and the communities as a whole

Immediate Actions

- A team for educating and explaining the regulations of World Heritage designation by visiting the pol houses individually;

- Electing representatives from each pol who will be actively involved in transparent communication between the owners and the other stakeholders;
- Capacity building workshops to train a group of people in each pol who would carry out regular maintenance in their pols;

Long-term Actions

- Carrying out different surveys in the pols to understand the requirement of the land-use, lack of services, infrastructure needs, employment opportunities, maintenance and conservation requirements.
- Monthly stakeholder meetings between the representatives of pols, restoration specialists, city officials, NGOs and developers.
- A team to prepare the documents for applying for TDR and getting the approvals in a timely and efficient manner
- Incorporating on-site conservation and maintenance of heritage in university syllabus (architecture and civil engineering students) in return for either credits/internship/certificate/possible job opportunities;
- Educating the children of the city - Walled city and the new city, about the heritage of the city and its values through heritage walks, workshops, class projects, picnics, and including the heritage stories in their syllabus;
- Provision of conservation manuals to all the houses in pols and the provision through online access;

- Utilizing media and technology for efficient communication between the government and the people of the Walled city for better implementation of the policies;

7.1.4 Urban Planning and Heritage Policy: Devising feasible policies and legislative framework addressing the urban planning issues within the Walled city, and ensuring the effective use of the policies by the different stakeholders and comfortable lifestyle for the communities.

Immediate Actions

- Designing a comprehensive short-term plan and long-term plan for the Walled city;
- Introducing consequences for not following the regulations introduced by the government, and for any deliberate damage done to the historic property, including tearing down the building, illegal additions and alterations to the structure, graffiti and other damages that have a visual, cultural and structural impact on the historic property;
- Planning alternative strategies for handling the traffic congestion and parking problems;
- Introducing the facilities required for providing running water for 24hrs in the Walled city;
- Establishing a monitoring committee;
- Making the documentation of all the heritage properties available to the public;
- Making a land-use plan for the pol houses of the Walled city.

Long-term Actions

- An easy and straightforward system to navigate the application and approval process of policies

A vacant and deteriorated pol house is a waste of resource in terms of space, materials and use. When this resource is utilized to serve the community in the form of social services, schools, hospitals, promoting traditional arts and crafts, contributing to the social and economic development, the pol houses become an essential resource for sustainable development.

These policies, when implemented simultaneously, could contribute to better functioning of the Walled city, and positively impact the social, economic and sustainable development of the city.

7.2 Proposed Governance Framework

The proposed governance framework aims to address the needs and the wants of the communities through utilization of the abundant resource such as pol houses and thus create a sustainable environment which contributes to the social and economic development of the Walled city.

The policies and actions proposed can only be implemented if all the stakeholders are actively involved in its working. This section expands on the roles and responsibilities of the stakeholders, individually or collectively, to implement each policy successfully. Different actions can be

overlapped to achieve the objectives of different policies. In an ideal scenario, all the stakeholders are actively involved in fulfilling their roles towards efficiently using the pol houses as a resource for the socio-economic development of the Walled city.

The actors who can contribute and get involved in the implementation of these policies are:

- Local government;
- Residents of the Walled City;
- Restoration specialists;
- Developers/ Investors;
- Nonprofit organizations;
- Public: user group who are not residents of the Walled City but have vested interest in its preservation and development. These can be tourists, citizens of Ahmedabad, the state of Gujarat and the country.

7.2.1 An Intermediary Agency

Because of the top-down approach and the constant mistrust and miscommunication between the government and the communities, there is a need for the government to actively getting involved in understanding the needs and wants of the communities and include them in the decision-making process while devising the policies that would directly impact the community. Since the Walled city has a population of about 400,000 people and the heritage department of the AMC has a relatively less number of people working in the direction of the preservation of the pol houses, a new intermediary agency for managing conservation and the maintenance of

the pol houses needs to be established. This department would be the primary source of communication and integration between the different stakeholders as well as an active member in carrying out specific action plans of the proposed policies. The primary purpose of this agency is the implementation of several actions proposed in the four policies. It would bring the different stakeholders together and give them a platform to work collectively in a transparent environment.

Committees of the Agency

The intermediary agency will comprise of different committees responsible for different aspects associated with the conservation and maintenance of the pol houses. These are:

- Political Committee
- Executive Committee
- Monitoring Committee
- Networking Committee

Political Committee: It would work in collaboration with the Political wing of the Heritage department of AMC.

Executive Committee: It would work in collaboration with the Executive wing of the Heritage department of AMC. The Executive Committee will overlook the approval process for different policies for the owners and adaptive reuse projects of pols for promoting small-scale local businesses.

Monitoring Committee: It will overlook the implementation of all the projects and events carried out by the agency. It will be responsible for monitoring the head teams handling the execution of projects like a team of trained workers, documentation, and materials bank.

Networking Committee: It will be responsible for informing the people of the pols regarding the regulations of the World Heritage nomination. Since the people think that they would not be able to make changes to their house or sell their house once the city is inscribed on the list, they have been tearing down the historic fabric out of unprecedented fear. The Networking Committee would have a team that would visit every pol to provide information about the values, the process of being nominated, the importance of the inscription of the Walled City, and the regulations of World Heritage nomination. They will stop the people from destroying the pol houses any further.

The committee will also be responsible for organizing the stakeholder meetings, events for education and awareness regarding the latest policies, employment to the people of the Walled City and coordinating with architects and students regarding conservation internships.

The agency aims to:

- Provide a voice to the people of the Walled City;
- Bring together the stakeholders on a common platform and help them seek a shared vision for the city;
- Instill accountability in all the stakeholders by clearly defined roles;

- Be fair and just with everyone's rights;
- Be responsive to the needs of the stakeholders and advocating integration for the benefit of the people and the places;

The actions that would be implemented by the agency are:

Land- use plan

Making a land use plan specific to the pol houses with heritage value in the Walled City. This would provide an understanding of the scope of opportunities for future.

Long-term and Short-term vision

The Networking Committee will bring together the stakeholders to seek a shared long-term and short-term vision through regular meetings, on-field workshops, and lectures that would help in defining and ascribing the values that each stakeholder associates with the pol houses. These values would be the driver to determine the vision that would be shared and supported by all the stakeholders.

Employment Opportunities

The agency will employ 80 percent of its staff from the Walled city. All the committees of the intermediary agency will comprise of the owners of the Pol Houses in the Walled City of Ahmedabad, conservation experts, government officials and other relevant stakeholders. Hiring

the owners of the pol houses as part of the committee members would bring all the stakeholders on an equal footing and give voice to the people living in the Pols.

Conservation and Maintenance Manual

The restoration specialists and experts would be called in to draft a manual that explains the methods that should be adopted for proper conservation and maintenance of the pol houses in three languages, i.e., English, Gujarati and Hindi. The manual will have written statement as well as drawings that can be understood by every stakeholder.

The significance of the values of pols will be assessed by undertaking on field workshops where the restoration specialists and the city officials get together with the residents of the pols. The intention of the agency through this workshop is to understand the object of value for the communities by encouraging them to put forward their ideas and opinions by giving them a common platform with the other stakeholders. It also encourages an educational dialogue between different stakeholders where each explains what they value and why, and shared values are determined. Keeping these values in mind, and in collaboration with government officials and the communities of the pols, the restoration specialists will design the “Conservation and Maintenance manual for the Pols.”

Capacity Building

The monitoring committee of the agency will form an extensive team of trained workers who would carry out necessary maintenance of the pols. Each pol would have a team of three trained

workers selected from that pol, who would be employed by the agency. The number of team workers can be increased as required. Each team would report to the head team who would manage all the teams. If there needs to be a conservation project in a particular pol, the team of that pol would have the right to be hired by the firm taking up the project. The firm will also be given an option to hire teams from other pols for the project. Thus, this program contributes to employment growth, carrying forward the skills and knowledge of repairs and restoration of the historic fabric of the city, and scope of spreading that knowledge among younger generations. Through this system, the maintenance of the pol houses would be of no charge to the owners. This would create a positive outlook towards the conservation and maintenance of the pols in the minds of the communities.

Material Banks

A material bank is a place where one can find salvaged historic material that was brought in from a ruined pol house. The material can be bought to use it in the restoration of a pol house. These material banks will hire people from the Walled City itself. All the material banks would be managed and governed by the assigned members of the monitoring committee of the agency.

Conservation Internships

The government will incorporate on-site conservation internships as a part of the mandatory university syllabus for architecture and civil engineering students of the city in return for either credits/certificate/possible job opportunities. Allying with established architects and conservation architects to motivate the students to apply for the internship opportunities in the

hopes of learning under experienced architects of the city and possible job opportunities in their firms after graduation. This would contribute to the integration of different stakeholders when the students work alongside the experts while interacting and learning the culture and traditions of the residents of the pol houses.

Documentation

There is no available documentation of the nominated pol houses. To apply for any policies, the owners need to pay architects and draftsmen for the drawings of their houses. Since they cannot afford to do that, they miss out on the policies that could aid them in the maintenance of their house. Readily available drawings for all nominated houses need to be available for everyone to access. In addition to motivating the owners to use this documentation for different policies, this will lead to an increase in the resources available to the people for understanding and gain knowledge on the pol houses.

The agency would train people from the Walled city, volunteers and the interns in the skills of documentation, sketching and report writing. The pol houses become a resource that would be used to impart new skill sets to a different group of people and create more job opportunities.

7.2.2 Actions by Government

The Heritage Department of the AMC, in collaboration with the Heritage Conservation Committee of the State Government, would implement the following actions:

- AMC developing a vision for how they see the pol houses in five years, ten years and twenty years;
- City Government buying out vacant pol houses from the owners;
- The government covers the cost of the materials, while the owners cover the cost of the labor;
- Introducing consequences for breaking any regulations laid down by the government regarding the conservation of pol houses;
- AMC, in collaboration with AUDA (Ahmedabad Urban Development Authority), addresses the issues of traffic congestion and lack of parking space;
- One vacant pol house in every pol is converted into a community center. The center overlooks the different complaints of the people related to the working of the pol, community meetings and other stakeholder meetings can be carried out, and promotion of small scale business of the people of that pol can be done in this center. The center is managed by the elected representatives of the pols and is run by the people hired by the elected representatives from that pol itself;
- Restoration specialists in collaboration with the government would find affordable alternatives for wooden structural elements, toilets and kitchens;
- Local government carrying out extensive surveys to understand the needs of the people living in the Walled City
- AMC would make a Heritage Land Use plan in collaboration with AUDA (Ahmedabad Urban Development Authority). The plan would include the following details:

- Type of heritage property
- Number of floors
- Condition
- Total area - Plot area and Built area
- Owner details
- Use

In an ideal scenario, the collective action by the intermediary agency along with the different stakeholders can lead to successful management and conservation of the Pol Houses in the Walled City of Ahmedabad. The Pol Houses have the potential to be an ideal boon for the society and all the stakeholders must utilize this resource to maximize its benefits for the community. This, in turn, would create a harmonious relationship between the heritage and its people.

7.3 Strategy Development

The pol houses are plagued by many different issues. It is difficult to decide which factor to address first that could be a motivating factor for the conservation of the pol houses. While there are several factors affecting the pol houses and being major obstacles to their conservation, there are also strengths in each stakeholder that can contribute to be a start in improving the conservation practices in the Walled City of Ahmedabad.

The following strategy is an example where the goal is to make the people of the Walled City to feel ownership towards the pol houses and make them want to get involved in the conservation. It has to be noted that all the actions listed under the different steps of the strategy have been picked from the “Immediate Actions” and “Long-term Actions” under the four policies proposed above. This is an example on how those policies can be utilized to form various strategies over time.

Step 1: Gathering all the stakeholders and bringing out the voice of the people living in pols

The main strength of the Walled City is its people. People in the pols have strong unity among them because of the mutual trust and their shared values. Whenever in doubt, they reach out to their neighbors first. Their opinions and voices are valued the most among each other. The first step to motivate the people to practice conservation and maintenance of their heritage resource begins here.

As it was apparent in the section of “interviews with owners”, people have no idea on how to approach the conservation of pol houses. They don’t know how them, as a stakeholder, can play a role in creating a vision for the city. So the first thing that needs to be done is to get people involved and show them how their voice is important. It is important to understand that people, right now, do not want to get involved. Initially, to get people participate, the government has to take steps towards making them get involved, to show them that their voice matters, and only then would the people want to get involved themselves.

This can be only be done if people are motivated to participate by someone who they trust. A small local committee for each pol needs to be formed, who would be the representatives of that pol, by the people of the pols. To do so, first of all, the heritage department of AMC needs to introduce a ‘Networking Committee” and a “Monitoring Committee”.

Networking Committee: This committee would be responsible for informing the people to form a committee who would represent their pols. The condition that if the people fail to form a committee, the Networking Committee will form a team themselves needs to be given to the people or else they would not be motivated enough to get started. The Networking committee would organize stakeholder meetings where it invites the local committees to discuss the goals of the government, and ask people in what they need to make their lives easier. The meetings would involve brainstorming ideas on how could the pol houses be improved, what would make the people more involved in their maintenance , and what could the government do to provide the people what they need.

Monitoring Committee: This committee would monitor and follow up with all the ideas and commitments made by and to the people of the pols.

Local Committee: This committee is responsible for going to all the houses in their respective pols and talking to the people on what was discussed, taking surveys on the needs of people, communicating transparently between the government and the people, and having regular

meetings with all the owners of the pols to understand what they need for the maintenance and conservation of their houses.

Furthermore, the actions needed to be taken collectively by all the committees for improving the public participation are:

- Monthly stakeholder meetings
- Creating a shared vision in these meetings
- Forming a team of workers for each pol. This team would be formed of the people of pols by the local committee with the approval of majority of the people of that pol.

These workers would be trained by restoration experts called in by the Networking committee.

Step 2: Required Actions for the conservation of pol houses

Period of Execution: 1 – 3 yrs

Once there is a successful development in people's opinion towards the conservation of the pol houses, there are several options that the different stakeholders can choose from as a start.

One of the most important step that needs to be taken for the maximum integration of the stakeholders is for all of them to listen to each other. This step is to create a base that would guide the stakeholders towards the necessary actions. For instance, this step includes actions such as:

1. Local Committees carrying out surveys in their respective pols to understand the needs of the people. In addition to stakeholder meetings in the first step (which was to initiate public participation), the surveys would provide concrete proof and validations on the needs of the community, not only for the conservation of the pol houses, but also for a comfortable lifestyle in the pol houses.
2. Government and restoration specialist draft a “Conservation Manual”. “Conservation Manual” serves as a guideline that provides conservation techniques of different levels of budgets required for conservation. This guideline gives choices to the people to make decision for their own houses.
3. Documentation of all pol houses with heritage value is carried out by the government. This documentation is to be made available to public. This would help the people in having correct drawings when they apply for TDR certificate and improve their chances of approvals in a minimum amount of time.
4. Government covers the cost of the materials, while the owners cover the cost of the labor. This would incentivize communication between the government and the stakeholders. Successful implementation of this deal would contribute immensely in developing trust between the two stakeholders.
5. Introducing consequences for not following the regulations. Currently, there is no adequate monitoring process that keeps a watch on the pol houses in the Walled City. As mentioned earlier, two houses in just one pol have been destroyed in the last four years. No action has been taken against the owners. There needs to be consequences that the

owners are wary of in order to avoid future destruction of this valuable heritage resource.

These are the most basic step-wise actions that need to be taken to set up a ground for further conservation and maintenance initiatives. Implementing just these actions would make a huge difference in the condition of the pol houses today.

Step 3: Maximizing the positive impact of the conservation of pol houses.

Period of Execution: 5 - 10yrs

Once a platform for conservation practices is set up through “Step 2”, this step works in the direction to maximize the benefits of the pol houses and its conservation. There are abundant vacant pol houses existing and near ruins in the Walled City today. These vacant pol houses present a huge scope to serve as a resource for the people in the Walled City. One option to utilize these houses is for the Government to provide an option to the owners to sell the vacant and deteriorate pol houses. The government can then hire conservation architects for restoration and adaptive re-use of the pol houses, contributing to the increase in demands for the restoration specialists. The restored pol houses can serve as a public property serving a purpose as required by the people in the pol, understood through the surveys carried out during “Step 2” by the local committees.

Similarly, another step that can be taken towards utilizing the pol houses as a resource is establishing a materials bank. If the “Step 2” is implemented properly and there is an increase in the conservation practices, the demand for the historic materials would also increase.

Establishing materials bank can help address the increasing demands. Moreover, the materials derived from the ruins of the historic pol houses can be put to better use.

In conclusion, this three-step strategy was formulated using the actions that were proposed in the policies. This strategy addressed the issue of public participation and integration through the conservation of pol houses. Similarly, other strategies can be devised using the policies to address issues like policy and planning, infrastructure and services and social development.



Chapter 8: Conclusion

The process of this thesis on the Walled City of Ahmedabad has been extensive. The initial hypothesis was that the lack of conservation of the pol houses was due to the lack of awareness about the importance of the heritage among the people living in the pols. But the situation in the Walled City is not as simple.

Visiting the city and talking to the several stakeholders associated with the pol houses proved how wrong the initial hypothesis was. People loved living in the pol houses. Most of the people that were interviewed chose to live in the pol houses given the choice to live in the new city. They enjoyed the spaces that gave them a platform to share their culture, festivals, and traditions. Pol houses were their haven in the continuously changing world around them. This attachment of the people to the pol houses is one of the most important reasons that the Walled City of Ahmedabad has survived as a living heritage for six centuries. Moreover, people's involvement in current heritage related activities like the heritage walks, heritage week, and other cultural exhibitions is the evidence that people value the history of the city and are willing to participate in promoting the heritage. People's love towards this history and the urban settlement is the biggest asset that could contribute towards a better integration between the stakeholders.

(i) Burden vs Boon

One of the important lessons that I learnt during this thesis is that Heritage does not always get neglected because of the lack of awareness about its value or lack of action by the stakeholders. There are instances where people don't even know that their voice matters, or even needed.

There are so many other issues that need to be addressed in developing countries that protecting heritage properties becomes a burden. Especially in living heritage sites where the world around the site is evolving and the expectations from the heritage site is to stand still. People do not destroy heritage because of the lack of awareness about the value of heritage. They destroy it when the heritage holds them back.

This is a case where Heritage is misunderstood by the society. The thesis promotes a better understanding on a wide range of possibilities that Heritage has to offer to people. It proposes recommendations and several options where Heritage opens new opportunities for people such as job opportunities, easy access to documentations of their houses, facilitating easier process of gaining benefits from government policies, agency that gives a platform for equal voice to all stakeholders, and a transparent and a better integration with other stakeholders. If Heritage contributes in the socio-economic development of the stakeholders, there is no reason why people wouldn't take an active interest in protecting it.

(ii) Isolation Vs. Inclusion

Preserving and maintaining a heritage building is never a single agency's responsibility. There are always different stakeholders responsible for its protection. The experts in the field of heritage are aware of this but the people, the government, the communities associated with a heritage building will not always be aware of who is responsible for what. One of the main problems that arises in the implementation of different policies and plans for the preservation of a heritage

building is the lack of clearly defined roles and responsibilities of different stakeholders. No single stakeholder group has the ability or the capacity to change the system of preservation in a broader context. There needs to be a joint involvement of the stakeholders in changing the way we think about preservation.

Today, it would appear that one of the most common approaches in the field of preservation is *action in insolation*. In this scenario, every stakeholder has their own opinion on the scope and approach of preservation towards heritage. Some value history and aesthetics of a building, some value the land the building stands on, while some do not know that the building even has value. In the end, this significant gap in the opinions of the stakeholders leads to no action at all. Hence, it is essential to give equal voice to all the stakeholders, bring them together to seek a shared vision and give them equal resources to fulfill their duties towards the preservation of the heritage.

(iii) Change Vs. Continuity

“The more things change, the more they remain the same”

a. Jean-Baptista Alphonse Karr

Heritage was passed on to us by the past generations. There was a time when Heritage served a purpose. If the past generation had never made use of the heritage buildings, we would never possess the invaluable history and stories about the past that prove to be one of the most important sources of information. These stories and the important events of the history are

associated with the buildings and the context that they occurred in, and vice versa. Today, if the heritage buildings serve no purpose other than being a “museum”, our stories would never be told to the future. It is our responsibility to teach the future generation to treat our heritage with the respect that it deserves and value it as the invaluable resource that it is. Heritage was passed down to us in the hope that they would make the lives of the people easier by contributing in the socio-economic development of the country. When heritage serves as a function to the people, not only does that make the people feel ownership towards it, but it also adds to the value associated with the heritage today, and for the future.

One of the critical things that can be learned from the case of the Walled City of Ahmedabad is that *change* is necessary for the *continuity* of the use of the city as an urban settlement. The Walled City has survived for six centuries because it has kept evolving and adapting to the contemporary world. This evolution and change needs to continue for the people to continue living in the pols. These change can also be in the way that we think about preservation in addition to the changes that have been happening in the construction and materials of the pol houses. It can be in the way we use our resources, the way we use or don't use our heritage buildings, and the way that we do conservation treatments to our buildings. The proposal in the thesis provides the policies which addresses the ways in which the changes in the pols and the pol houses be regulated for the protection and preservation of the heritage properties.

The field of preservation has seen a continuous evolution in the conservation treatments of the historic materials. Continuous research is carried out in finding the best ways to treat historic

buildings. Despite that, more research needs to be done in finding the ways to open the field of preservation to new approaches. Changing our approach to strive for better preservation practice will contribute to the continuity of our heritage in the lives of the people today and for the future generations.

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